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SUPPLEMENT

TO THE

ANNUAL REPORT

OF THE

State Engineer and Surveyor

OF THE

STATE OF NEW YORK

For the Fiscal Year Ending September 30, 1906

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1907

REPORT

OF

Records and Gagings

AND

Discharge of Streams

IN THE

STATE OF NEW YORK.

1906.

176085

REPORT ON THE GAGING OF STREAMS FOR 1906.

Hon. Henry A. Van Alstyne, *State Engineer and Surveyor:*

Dear Sir.—The following report contains the results of observations of water-levels along the lines of the Barge canal as well as at gaging stations maintained in co-operation with the United States Geological Survey for the purpose of determining the discharge of streams throughout the state. About ninety gages have been maintained in connection with the Barge canal department, under the immediate direction of Mr. Henry C. Allen, Special Deputy State Engineer. A list of these gages is given in the following table. The mean daily elevation of water-surface at the different stations for such portions of the years 1904, 1905 and 1906, as are covered by the records, are published in this report. The discharge is determined at a few of these gaging stations. The methods used being analogous to those employed by the U. S. Geological Survey and hereafter described. As a rule two observations of water-level are made each day and the mean of the two has been used in determining the elevation of water-surface. Stations at Cohoes, Hoosick Falls, Glens Falls, Northville, Schaghticoke, Fort Hunter, Schenectady, and Schoharie Junction, are maintained during the four winter months, December to March, inclusive, by the U. S. Weather Bureau, under the direction of Mr. George T. Todd, Local Forecaster.

The work of stream gaging in connection with the Barge canal was under the general supervision of C. Arthur Poole, First Assistant Engineer, preceding July, 1906, and of Robert E. Horton, Resident Engineer, during the remainder of the year.

Most of the stations maintained by this Department are solely for the purpose of recording the water-level, and are not used to determine the discharge. In such cases readings are taken only to the nearest one-tenth foot.

Heretofore the gages have been set and repaired from the field offices. A recent inspection of the gaging stations indicates in many cases that the gages have become defective, so that errors have been introduced into the records. Owing to changing conditions it has not been possible to correct the readings. It is believed, however, that the errors due to defective gages will not exceed one-tenth or two-tenths of a foot in most cases. Inasmuch as these errors will not greatly affect the value of the results for some purposes, the readings are published in their original form. Pending repairs and rechecking of these gages, the words "gage defective" have been appended to records that may be in error from this cause.

An annual appropriation for stream gaging in co-operation with the U. S. Geological Survey was made by the State Legislature in each of the years 1900 to 1904 and again in 1906. The results of this work, which was carried on under the joint direction of the Division of Hydrography of the Geological Survey and the State Engineer and Surveyor, have been published in the reports of the State Engineer and Surveyor.

For the period January, 1905, to June 30, 1906, no co-operative fund was available. The gaging stations were, however, continued by the Geological Survey and the results have been included in the report of the State Engineer, thus maintaining the published series of records complete. The co-operative stream gaging was under the immediate direction of Robert E. Horton, Engineer, U. S. Geological Survey, from March, 1900, to June, 1906, and under direction of H. K. Barrows, Engineer, U. S. Geological Survey, subsequent to June, 1906.

The locations of all gaging stations for which records appear in this report are shown on the accompanying map.

Acknowledgment should be made to the Consolidated Water Co. f Utica, N. Y., for furnishing records of rainfall and flow for Starch Factory, Sylvan Glen and West Canada creeks; to the West Virginia Pulp and Paper Co. for a record of discharge of Hudson river at Mechanicville, N. Y.; and to E. A. Fisher, City Engineer, Rochester, N. Y., for gage readings on Genesee river.

Respectfully submitted,

ROBERT E. HORTON,

Resident Engineer.

December 21, 1906.

CO-OPERATIVE GAGING STATIONS MAINTAINED IN NEW YORK DURING 1906.

STREAM.	Gaging station.	County.	Drainage area, square miles.	Reference.	Reciprocal.	Record from.	Observer.
Allegheny river	Red House, N. Y	Cattaraugus	1,642	.....	.000609	Sept. 4, 1903	G. H. Smith.
Black river	Felts Mills, N. Y	Jefferson	1,851	c b	.0005402	Aug. 29, 1902	W. B. Dempsey.
Chemung river	Chemung, N. Y	Chemung	2,381	d	.000420	Sept. 7, 1903	Dan. L. Orcutt.
Chittenango creek	Chittenango, N. Y	Madison	78.9	b c	.012674	May 22, 1901	Bessie Kellogg.
Catskill creek	South Cairo, N. Y	Greene	263	b	.003802	July 4, 1901	Eugene Stewart.
Chenango river	Binghamton, N. Y	Broome	1,528	b	.0006544	July 31, 1901	W. R. Monroe.
Delaware river, W. Br.	Hancock, N. Y	Delaware	685	c	.001460	Oct. 15, 1902	David Pulver.
Delaware river, E. Br.	Hancock, N. Y	Delaware	919	c	.001088	Oct. 15, 1902	D. B. Van Etten.
Esopus creek	Kingston, N. Y	Ulster	324.5	b	.003082	July 5, 1901	John Douglas.
East Canada creek	Dolgeville, N. Y	Herkimer	256	b	.003906	Sept. 23, 1898	Godfrey Aman.
Genesee river	Jones Br., near Mt. Morris, N. Y	Livingston	1,412	b e	.0007082	May 22, 1903	J. T. Trewer.
Genesee river	Mt. Morris, N. Y	Livingston	1,070	c e	.0009346	....	
Genesee river	Rochester, N. Y	Monroe	2,365	c e	.0004228	....	City Engineer.
Graefenburg creek	New Hartford, N. Y	Herkimer	0.282	a	3.546	June 7, 1903	Richard Owen.
Hoosic river	Buskirk, N. Y	Rensselaer	....	......	....	Sept. 25, 1903	Bert C. Henry.
Hudson river	Fort Edward, N. Y	Saratoga	2,800	b c	.000357	Dec. 1, 1895	F. E. Chapman.
Hudson river	Mechanicville, N. Y	Saratoga	4,500	b c	.000222	Jan. 1, 1888	R. P. Bloss.
Housatonic river	Gaylordsville, Conn	Litchfield	1,020	a	.0009803	Oct. 23, 1900	G. H. Monroe.
Honeoye creek	East Rush, N. Y	Monroe	238	e	.0042017	Feb. 13, 1903	John Tucker.
Indian lake	Indian Lake, N. Y	Hamilton	146	c	.0068493	July 22, 1903	Lester Savorie.
Kinderhook creek	Rossman, N. Y	Columbia	....	......	....	Mar. 17, 1906	Wesley Ham.
Lake Champlain	Ft. Montgomery, Rouses Point, N. Y	Clinton	7,750	......	.00012903	Jan. 1, 1875	Wm. McComb.
Lake George outlet	Ticonderoga, N. Y	Essex	220	a	.00455	Aug 24, 1904	C. E. Carpenter.
Mohawk river	Dunsbach Ferry, N. Y	Saratoga	3,440	b c	.0002907	Oct. 1, 1898	Robert Wilson.
Mohawk river	Little Falls, N. Y	Herkimer	1,306	b c	.0007657	Sept. 23, 1898	John Smeltz. E. Shanley.
Moose river	Moose river, N. Y	Lewis	374.1	b a	.002673	June 5, 1900	Chris. Hannan.
Oriskany creek	Colemans	Oneida	141	b	.00709	Aug. 13, 1904	Peter Gambel.
Oneida river	Schroeppel's Br., Euclid P. O., N. Y	Oswego	1,313	b c	.0007616	Aug. 31, 1902	Arthur McArthur.
Oswego river	Battle Island, N. Y	Oswego	4,990	b	.0002004	Sept. 14, 1900	May Parmley.
Oswegatchie river	Eel Weir Br., near Ogdensburg, N. Y	St. Lawrence	1,577	b	.0006341	April 22, 1903	Jos. H. LaRue.
Raquette river	Massena Springs, N. Y	St. Lawrence	1,168.7	b a	.0008554	Sept. 21, 1903	G. L. Buffham.
Saranac river	Plattsburg, N. Y	Clinton	624	b	.0016025	Mar. 27, 1903	A. C. Hare.
Susquehanna river	Binghamton, N. Y	Broome	2,400	b	.0004166	July 31, 1901	W. R. Monroe.
Salmon river	Fox Bridge, near Pulaski, N. Y	Oswego	264	a b	.003788	Sept. 6, 1900	S. J. Fox.
Schoharie creek	Prattsville, N. Y	Greene	240	b	.004167	Nov. 7, 1902	James Brennan.
Starch Factory creek	New Hartford, N. Y	Herkimer	3.81	a	.2624	May 26, 1903	Geo. Savage.
Seneca river	Baldwinsville, N. Y	Onondaga	3,103	b	.0003223	Nov. 12, 1898	Chas. Brannock.
Skaneateles outlet	Willow Glen, N. Y	Onondaga	74.2	a	.013477	Mar. 10, 1895	Edward Conron.
Sylvan Glen creek	New Hartford, N. Y	Oneida	1.18	a	.8475	June 12, 1903	John Adrean.
West Canada creek	Twin Rock Bridge, N. Y	Oneida	364	a	.002747	Sept. 9, 1900	Frank McArthur.
West Canada creek	Kast Bridge, N. Y	Herkimer	574	a	.00174	May 15, 1905	Lloyd Kast.

a, U. S. Top. Map; b, Bien's Atlas; c, To be checked or recomputed from U. S. G. S. maps; d, Map, Genesee River Watershed.

GAGING STATIONS ESTABLISHED AND MAINTAINED FOR THE BARGE CANAL IMPROVEMENT.

STREAM	Location.	Observer.	Gage established.
	(EASTERN DIVISION.)		
	Lake Champlain Drainage Basin.		
Lake Champlain	Below dam at Whitehall	S. H. Pearson	Jan. 22, 1905
Wood creek	Above dam at Whitehall	S. H. Pearson	Sept. 19 1904
	Hudson River Drainage Basin.		
Hudson river	Corinth, N. Y	A. M. Hollister	Oct. 4, 1906
Hudson river	Above feeder dam at Glens Falls	Frank Sisson	Mar. 9, 1905
Hudson river	On Bridge street bridge at Fort Edward	B. F. Thebo	April 11, 1904
Hudson river	Opposite Snook hill	R. S. Metcalf	April 11, 1904
Hudson river	Opposite Moses kill	T. B. Sanders	Nov. 30, 1906
Hudson river	Above Crocker's Reef	F. C. Bristol	April 11, 1904
Hudson river	Above dam at Fort Miller	L. C. Brazier	April 11, 1904
Hudson river	Below dam at Fort Miller	L. C. Brazier	May 1, 1904
Hudson river	About one mile below Fort Miller	L. C. Brazier	April 11, 1904
Hudson river	Above dam at Northumberland	G. Hammond	April 11, 1904
Hudson river	On free bridge at Clark's Mills	Wm. Dunstan	Oct. 23, 1905
Hudson river	On Ferry St. bridge, toll bridge at Schuylerville	W. J. Curtis	Aug. 14, 1905
Hudson river	On B. & M. R. R. bridge above Mechanicville	W D. La Bar	Aug. 15, 1905
Hudson river	On toll bridge at Mechanicville	W. E. Downing	Aug. 16, 1905
Hudson river	Above Electric Power Company's dam below Mechanicville	H. C. Tinker	Aug. 18, 1905
Hudson river	Below Electric Power Company's dam below Mechanicville	H. C. Tinker	Aug. 18, 1905
Hudson river	Above State dam at Troy	J. B. Mackey	Oct. 30, 1904
Hudson river	Below State dam at Troy	J. B. Mackey	April 1, 1904
Hoosick river	Above dam at Hoosick Falls	S. L. Cluett	April 3, 1904
Hoosick river	Above upper dam at Schaghticoke	G. W Baldwin	April 3, 1904
Sacandaga river	On highway bridge at Northville	A. H. Pickard	Dec. 1, 1904
	Mohawk River Drainage Basin.		
Mohawk river	Above Cohoes Water Company's dam at Cohoes	Wm. Butler	April 1, 1904
Mohawk river	Above State dam at Rexford Flats	J. Reepmeyer, Jr	Aug. 24, 1905
Mohawk river	On Scotia highway bridge at Schenectady	J. J. Vrooman	April 3, 1904
Mohawk river	On Suspension bridge at Tribes Hill	S. S. Fonda	April 3, 1904
Mohawk river	On Fultonville Br., Fonda	R. H. Merrill	
Mohawk river	On highway bridge at Fort Plain	A. Devendorf	Jan. 1, 1906
Mohawk river	Above State dam, Little Falls	W. Quackenbush	Nov. 18, 1904
Mohawk river	On highway bridge between Mohawk and Herkimer	H. Edick, Jr	Nov. 23, 1904
Mohawk river	On Black River R. R. bridge at Utica	J. B. Mahoney	Mar. 21, 1905
Mohawk river	State dam, Rome		
Schoharie creek	Middleburg	Minnie Wheeler	Aug. 23, 1906

Schoharie creek	**On D. & H. R. R. bridge at Schoharie Junction**	**A. H. Spencer**	**Apr. 3, 1904**
Schoharie creek	**On West Shore R. R. bridge at Fort Hunter**	**E. L. Hoffman**	**Nov. 18, 1904**
West Canada creek	**Below Utica Light and Power Co's. power-house**	**C. W. Young**	**Nov. 10, 1904**
West Canada creek	**Above Utica Light and Power Co's. dam**	**C. W. Young**	**Oct. 18, 1905**
	(MIDDLE DIVISION.)		
Nine Mile creek	**On Powell's bridge below Stittville**	**Raymer Powell**	**Nov. 4, 1905**
Mohawk river	**Below State dam at Rome**	**John Phillips**	**May 3, 1904**
Mohawk river	**Above State dam at Rome**	**John Phillips**	**May 3, 1904**
Mohawk river	**Below dam at Ridge Mills**	**Daniel Brown**	**May 3, 1904**
Mohawk river	**Above dam at Ridge Mills**	**Daniel Brown**	**May 3, 1904**
Mohawk river	**On highway bridge about two miles below Delta**	**Fred Miller**	**Aug. 20, 1905**
Mohawk river	**Below dam at Delta**	**E. A. Evans**	**May 3, 1904**
Mohawk river	**Above dam at Delta**	**E. A. Evans**	**May 3, 1904**
	Oneida River Drainage Basin.		
Fish creek	On highway bridge at Sylvan Beach	F. B. Randall	June 22, 1904
Oneida river	On bridge at Brewerton	—. Hubbard	April 22, 1904
Oneida river	Above lock at Caughdenoy	Adniram Hart	April 22, 1904
Oneida river	Below lock at Caughdenoy	Adniram Hart	April 22, 1904
Oneida river	Above dam at Oak Orchard	L. McArthur	April 23, 1904
Oneida river	Below dam at Oak Orchard	L. McArthur	April 23, 1904
Oneida river	On highway bridge at Three River Point	J. Chamberlain	April 16, 1904
Limestone creek	Above State dam at Fayetteville	Edward Strong	Aug. 27, 1905
	Oswego River.		
Oswego river	Above dam at Phoenix	G. Archambo	April 16, 1904
Oswego river	Below dam at Phoenix	G. Archambo	April 17, 1904
Oswego river	On highway bridge at Hinmansville	F. M. Hughes	April 13, 1904
Oswego river	Above site of old Horseshoe dam	F. M. Hughes	April 13, 1904
Oswego river	Below site of old Horseshoe dam	F. H. Hughes	April 13, 1904
Oswego river	At mouth of Ox creek	J. M. Johnson	April 12, 1904
Oswego river	Above Oswego falls dam	Read by men from Barge canal office, at Fulton.	April 9, 1904
Oswego river	Above lower Fulton dam		April 9, 1904
Oswego river	At mouth of Black creek		April 9, 1904
Oswego river	Above Battle Island dam	Smith Sharp	April 11, 1904
Oswego river	Below Battle Island dam	Smith Sharp	April 11, 1904
Oswego river	Above Minetto dam	Roy L. Smith	April 8, 1904
Oswego river	Below Minetto dam	Roy L. Smith	April 8, 1904
Oswego river	Above High dam	S. L. Purdy	April 7, 1904
Oswego river	Below High dam	S. L. Purdy	April 7, 1904
Oswego river	Above dam at Oswego	D. D. Tompkins	April 7, 1904
	Seneca River Drainage Basin.		
Onondaga lake	At outlet near Long Branch	Read by men from Barge canal office, Syracuse.	April 16, 1904
Onondaga lake	At head of lake		May 14, 1904
Seneca river	At head of Gaskin Reef	Solomon Walts	April 14, 1904
Seneca river	On highway bridge at Belgium	Solomon Walts	April 14, 1904
Seneca river	At Mud lock	Frank Shane	April 16, 1904
Seneca river	At foot of Jack's Reefs	A. A. Fuller	April 20, 1904

GAGING STATIONS ESTABLISHED AND MAINTAINED FOR THE BARGE CANAL IMPROVEMENT—(Concluded).

STREAM.	Location.	Observer.	Gage established.
	MIDDLE DIVISION—*Senaca River Drainage Basin*—(Concluded).		
Seneca river	Above Jack's Reefs	A. A. Fuller	April 20, 1904
Seneca river	On highway bridge one-half mile west of Cross lake	Ed. Carlton	May 1, 1904
Seneca river	On highway bridge at Mosquito Point	Wm. Prettie	April 21, 1904
Seneca river	At N. Y. C. & H. R. R. R. bridge near Fox Ridge	James Ray	May 4, 1904
Seneca river	At West Mud lock at foot of lake	Edward Jones	Oct. 10, 1905
	(WESTERN DIVISION.)		
Clyde river	On Sodus street bridge at Clyde	J. F. Wickham	Oct. 20, 1905
Clyde river	On Geneva street bridge at Lyons	B. C. Office, Lyons	Sept. 28, 1905
Ganargua creek	On highway bridge one and one-half miles west of Newark	Wm. J. Swartz	Nov. 30, 1905
	Genesee River Drainage Basin.		
Genesee river	On W. S. R. R. bridge at Genesee Junction	G. E. Krill	Mar. 21, 1905
Genesee river	On Brown's bridge near Scottsville	Jas. Farrell	Mar. 21, 1905
	Lake Erie Drainage.		
Erie canal	On Change bridge at Pendleton	Jacob Snell, Jr.	Jan. 30, 1905
Tonawanda creek	Above dam at Tonawanda	Read by men from Barge canal office, Tonawanda.	Jan. 23, 1905
Niagara river	Below dam at Tonawanda		Jan. 23, 1905

METHODS EMPLOYED.

In the establishment of gaging stations no single method of gaging has been employed to the exclusion of others. In many instances two or more methods have been combined at a single station. The principal methods have been the use of dams as weirs in conjunction with records of the flow through turbines or other outlets at mills, and the current-meter method. Gagings by thin-edged weirs and through thin partitions or orifices have been used to some extent in the case of small streams. Surface-floats, rod-floats and the surface-slope methods are also used in cases where the current-meter cannot be utilized.

The gages at the co-operative stations are chiefly cypress planks with galvanized staple division marks and brass figures. At the Barge canal stations the gages are mostly thin boards with painted or burned division figures and marks. These gages are replaced by the resident engineers, when they become broken or illegible. Weight-and-chain or weight-and-tape gages of different patterns are used in certain locations.

In determining the discharge at dams and mills the method of procedure is as follows: A profile of the crest of the dam is obtained and is divided into sections, all points in a given section being nearly or precisely at the same elevation. The discharge over each section is computed for a series of crest-depths, ranging from zero to the extreme high-water mark. The summation of these sectional discharge curves furnishes data for a rating table for the entire dam, from which the volume of flow corresponding to any gage height can be read directly. When flash-boards are placed on dams, the conditions are reduced more nearly to those of a standard thin-edged weir, and Francis' well-known formula has been used in computing the discharge. The flow over waste-weirs, auxiliary spillways and flood overflows has been calculated in a manner similar to that used for dams. The amount of flow through head-gates, sluiceways, feeder gates and similar openings has been calculated from the formula for orifices.

In estimating the discharge through turbine water-wheels the results of tests, made at the testing flume of the Holyoke Water Power Company, have been largely depended upon, the mean discharge for each day having been computed from the observed working head, width of opening of speed gates and number of hours each wheel has run. A record of these facts is kept at each of the stations where there are mills in connection with dams.

One difficulty encountered in gaging northern streams results from the accumulation of ice during the winter season. It has been found impossible to keep some dams clear of ice, and an effort is made to keep a record of the length of the clear and unobstructed portion of the dam, from which a correction in the calculated flow can be made.

The method of gaging at dams and mills and the necessary data for the calculation of discharge over weirs or through turbines may be found in the water-supply and irrigation papers of the U. S. Geological Survey, Nos. 150 and 180.[a]

For current-meter gaging stations a modified form of small Price meter has generally been used. In making gagings of streams the usual method of procedure is to submerge the current-meter six-tenths of the depth of the stream at measured intervals across the channel, and to record the revolutions for a period of 100 seconds. The time is noted by means of a stop watch reading to one-fifth seconds and the period of observation is usually subdivided into two intervals of fifty seconds each.

The current-meters used are calibrated each year at the rating station of the Geological Survey at Chevy Chase, Md. A rating table for the meter is then prepared, by means of which the velocity of flow of the stream can be deduced from the observed revolutions per second of the meter-wheel. Soundings are taken in connection with the meter observations, and a simple multiplication of the velocity in each subsection by the cross-sectional area to which it applies gives the rate of discharge for the subsection. A summation of the quantities for the several subsections gives the total measured volume of flow. A river height gage is established at each current-meter station, from which the stage of the stream is observed once or twice daily. Current-meter measurements of the discharge are made from time to time as opportunity permits. After a sufficient number of discharge measurements have been made they are plotted, using the gage heights of the stream as ordinates and the measured discharges as abscissas. A mean curve is drawn through the plotted points showing the discharge rate in second-feet as a function of the gage reading. By means of this curve the average discharge rate for each day is deduced from the record of the height of the stream kept by the gage reader.

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[a] "Weir Experiments, Coefficients and Formulas" and "Turbine Water Wheel Tests and Power Tables," by Robert E. Horton.

The principal sources of error in gaging streams by the current-meter method are due to the effect of slack, or nearly slack water in any part of the cross-section, or to backwater from dams, from obstructing ice, or from tributaries entering below the gaging station, thereby causing the river stage to rise at times without a proportional increase in the discharge. In accordance with the well-known Kutter formula, the volume of flow in an open channel is a function of the slope, the area of cross-section and the wetted perimeter. When a stream is rising, the slope is usually greater at a given stage of the stream than at the same stage when falling. Northern streams, as a rule, rise rapidly and fall gradually, so that the stream is falling on the majority of days of the year. The error from the above source is small, inasmuch as the discharge varies only as the square root of the slope. The principal difficulty encountered results from the freezing over of streams in winter. The ice serves greatly to increase the wetted perimeter of the measuring section, thereby modifying the rating curve. Whenever practicable, discharge measurements during winter months are made through the ice.

When streams are ice-covered, an opening is kept underneath the gage and the gage reading is taken directly to water-surface level, as in summer. A record is also kept of the ice thickness in inches.

The accuracy of individual current-meter measurements depends chiefly upon the number of the velocity observations and soundings taken in the cross-section. During freshets and at times when ice or debris is floating on the stream's surface, the current-meter cannot be submerged to a six-tenths depth, and readings are taken by holding the meter about one foot below the surface. As a check on the accuracy of the general results and to determine suitable coefficients for the estimation of the mean velocity from that obtained by current-meter, vertical velocity curves are made from time to time.

Owing to rapid fall, with frequent rifts, backwater from dams, obstruction by ice, and other characteristics of New York streams, the difficulty of maintaining continuous gaging records, which will show with sufficient accuracy the discharge rate day by day throughout the year, is very great. This is especially true in streams whose discharge fluctuates between wide limits.

In many cases methods of gaging applicable at low and ordinary stages may not give equally reliable results during freshets; or the reverse may be true, the results being most accurate for high water.

For mill streams, where the water is held back as pond-storage during the dry season, it is impossible to determine the natural regimen of flow of the stream. This is especially true with reference to Sundays or holidays, when mills are not running. If, at any time, the water-wheels are stopped when the water stands below the level of the crest line of the dam, the flow in the stream channel below will be *nil,* or at best, will equal only the leakage of the dam, flumes, or penstocks.

The relation existing between the canals of New York and the streams of the central portion of the state is very complex. Diversion from the head waters of a number of streams for the supply of canals virtually reduces their effective drainage areas. As a result, the summer watershed may be materially less in area and differ widely in its water-yielding characteristics from the region tributary to the stream when the canals are not in operation.

In this connection attention should be called to the maximum daily discharge for each month as given in the following report. This is obtained from the mean of the gaging readings on the day of maximum discharge. As a rule, the discharge at some time in the course of the day was considerably greater than the average for the twenty-four-hour period.

In connection with the gaging stations it is necessary to employ, as observers, persons living near the site selected for the measuring section—those, who, as a rule, have had no previous experience in similar work. Their observations are forwarded at the end of each week. As a check on the records so obtained, inspection trips are made at frequent intervals and independent gage readings taken by the hydrographer. The close agreement found in most cases testifies to the intelligent and careful work of the observers.

LAKE CHAMPLAIN DRAINAGE BASIN.

DESCRIPTION OF BASIN.

Lake Champlain occupies a long and narrow valley, extending in a north-south direction and forming a part of the boundary between New York and Vermont. The elevation of the lake is about ninety-five feet above tide and the water-surface area is 436 square miles.

The drainage basin is irregular in form, being about seventy-five miles wide from a point opposite Middlebury, Vt., northward to the outlet of the lake at Rouses Point, on the international boundary. South of Middlebury the average width of the basin is about thirty-five miles and the lake itself is very narrow, forming virtually a drowned river.

The tributary region is rugged and mountainous, mostly covered with forest and with little depth of soil except in the stream valleys. The drainage is received almost entirely through large tributaries, there being little direct coast drainage into the lake. The outlet of the lake is Richelieu river, which flows northward from Rouses Point to St. Lawrence river.

In estimating the run-off from this basin in previous years the drainage area has been taken as 7,500 square miles. Maps have recently become available from which the area of the lake and its tributary drainage basin have been accurately determined, as shown in the following table:

Drainage areas tributary to Lake Champlain.

LOCALITY.	Area.	Total area.
	Square miles.	*Square miles*
Pike river and adjacent area in Canada	*a*242.0	
Missisquoi river in Canada	*b*245.0	
Land area in Canada above outlet		*a*487
Missisquoi river in Vermont	*b*615.0	
(Total Missisquoi river, 860 square miles.)		
Lamoille river	*b*725.0	
Winooski river	*b*995.0	
Otter creek	*b*935.0	
Eastern coast drainage	*b*534.4	
Mettawee, Poultney and Castleton rivers in Vermont	*c*376.0	
(Castleton river, 101 square miles.)		
Land area in Vermont, except islands		4,180.4

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a From maps of Canadian Geological Survey. Scale: 4 miles = 1 inch.
b From United States post-route maps. Scale: 12.5 miles = 1 inch.
c From topographic maps of United States Geological Survey. Scale: 1 mile = 1 inch.

Drainage areas tributary to Lake Champlain—(Concluded).

LOCALITY.	Area.	Total area.
	Square miles.	*Square miles.*
(Poultney river, including Castleton river, *c*265.8 square miles.)		
Wood creek	*c*205.0	
(Mettawee river, including Wood creek, *c*427.8 square miles.)		
Mettawee and Poultney rivers in New York	*c*112.6	
Lake George outlet	220.1	
Bouquet river	*c*268.9	
Ausable river	*d*521.3	
Little Ausable river	*d*75.1	
Saranac river	*d*629.6	
Little Chazy river	*c*63.8	
Big Chazy river	*d*299.4	
Western coast drainage	*d*344.6	
Land area in New York, except islands		2,740.4
Islands	*e*55.2	55.2
Total land area above outlet		7,463.0
Water-surface in Canada	*a*16.5	
Water-surface in United States	*e*419.1	
Total water-surface		435.6
Total drainage above outlet		7,898.6
Richelieu river, Rouses Point to Chambly	*a*310.0	310.0
Total drainage area above Chambly		8,208.6
Richelieu river, Chambly to mouth	*a*626.3	626.3
(Total Richelieu river, 936.3 square miles.)		
Total drainage area above mouth		8,834.9

RICHELIEU RIVER AT FORT MONTGOMERY, N. Y.

A record of the height of Lake Champlain at Rouses Point, at the head of Richelieu river, the outlet of the lake, has been kept by the United States Corps of Engineers, beginning in 1875. Through the courtesy of Capt. Harry Taylor, the gage readings taken by William McComb, the fort keeper, at 9 a. m. each day, are reported weekly to the United States Geological Survey.

The depth of the water is taken on a reference mark on the base of the scarp wall, at the north face of bastian B, about three feet from the angle with the east curtain of Fort Montgomery. This reference point is 1.50 feet above an assumed zero, and 1.50 is added to the measured depth to determine the gage reading. In winter the depth as the water rises in a hole in the ice is commonly taken. On windy days the depth is taken in a well within the fort inclosure, by measuring the depth on a flagstone in the bottom of the well.

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a From maps of Canadian Geological Survey. Scale: 4 miles=1 inch.
c From topographic maps of United States Geological survey. Scale: 1 mile = 1 inch.
d From Bien's Atlas of New York. Scale: 2.5 miles = 1 inch.
e From charts of United States Coast and Geodetic Survey. Scale: 1:40,000.

Elevations at Fort Montgomery, N. Y.	Feet above tide.
Elevation of reference point on scarp wall of Fort Montgomery[a]	94.998
Elevation of gage zero	93.501
Assumed high water, Lake Champlain	102.611
Assumed low water, Lake Champlain	93.361

The range of rise and fall of the lake is thus seen to be 9.25 feet, representing an available storage volume of 6.24 feet on the entire catchment area. A variation in level of one foot per month is equivalent to a continuous storage or draft at the rate of 4,685 second-feet.

The land drainage area above Rouses Point is 7,463 square miles. The water surface of the lake, 436 square miles, should be added to the land area and the run-off computed for the whole drainage basin, 7,899 square miles.

The daily discharge of the lake has been determined from observations of the depth and discharge over the Chambly dam, thirty-five miles below the head of Richelieu river, made in 1898 by the United States Board on Deep Waterways. A rating table has been derived from the observations at the Chambly dam and the gage readings taken at Rouses Point. The area tributary to the river between Rouses Point and Chambly is 310 square miles, making the total drainage basin above Chambly, 8,200 square miles.

Mean Daily Gage Height, in Feet, of Richelieu River at Fort Montgomery, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	2.05	3.55	3.0	3.1	4.7	4.3	3.5	2.5	1.5	1.1	0.7	1.5
2	2.2	3.4	3.05	3.15	4.75	4.25	3.65	2.5	1.6	1.15	0.8	1.5
3	2.15	3.5	3.0	3.2	4.7	4.2	3.4	2.5	1.5	1.1	0.9	1.5
4	2.3	3.7	3.0	3.2	4.75	4.1	3.45	2.55	1.45	1.1	0.8	1.4
5	2.25	3.35	3.05	3.15	4.65	4.05	3.4	2.5	1.6	1.1	0.75	1.4
6	2.3	3.3	3.15	3.2	4.6	4.1	3.4	2.45	1.75	1.35	0.8	1.4
7	2.25	3.25	3.2	3.25	4.5	4.0	3.35	2.3	1.6	1.0	0.7	1.45
8	2.2	3.3	3.1	3.3	4.5	4.15	3.3	2.25	1.5	1.05	0.75	1.5
9	2.25	3.15	3.05	3.4	4.65	4.1	3.4	2.25	1.55	1.5	0.7	1.5
10	2.3	3.2	3.05	3.4	4.5	4.15	3.25	2.4	1.5	0.9	0.75	1.5
11	2.25	3.2	3.05	3.45	4.4	4.05	3.2	2.6	1.55	0.9	0.8	1.5
12	2.2	3.15	3.0	3.5	4.7	4.1	3.2	2.4	1.65	0.8	0.7	1.5
13	2.1	3.05	3.05	3.55	4.65	4.05	3.3	2.3	1.8	1.0	0.75	1.55
14	2.15	3.0	2.95	4.1	4.55	4.1	3.15	2.05	1.45	0.9	0.8	1.5
15	2.2	3.0	2.9	3.9	4.65	4.0	3.25	1.95	1.3	0.9	0.8	1.6
16	2.4	3.1	2.85	3.8	4.7	4.1	3.2	2.0	1.45	0.75	0.8	1.45
17	2.1	3.05	2.85	4.0	4.65	4.1	3.0	2.15	1.5	0.85	0.85	1.5
18	2.2	3.1	2.75	4.25	4.7	3.95	3.0	2.0	1.4	0.8	1.05	1.4
19	2.1	3.0	2.8	4.3	4.55	3.85	3.05	2.0	1.3	1.0	0.95	1.45
20	2.4	3.1	2.7	4.45	4.5	3.75	3.15	1.95	1.3	0.75	1.1	1.4
21	2.25	3.15	2.8	4.6	4.4	3.75	3.0	1.9	1.2	.75	1.15	1.45
22	2.3	3.0	2.65	4.7	4.4	3.65	2.95	1.8	1.2	.8	1.2	1.5
23	2.45	3.05	2.55	4.75	4.4	3.6	2.8	1.7	1.15	.9	1.2	1.5
24	2.95	3.2	2.52	4.75	4.3	3.6	2.75	1.65	1.1	.9	1.2	1.5

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[a] United States Deep Waterways Report, pt. 1, p. 429.

Mean Daily Gage Height, in Feet, of Richelieu River at Fort Montgomery, N. Y. Contin'd.

DAY.	Jan.	Feb.	March	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
25	3.2	3.1	2.5	4.85	4.35	3.65	2.6	1.9	1.2	.85	1.35	1.45
26	3.5	3.05	2.55	4.9	4.45	3.75	2.75	1.85	1.4	.9	1.4	1.45
27	3.6	3.05	2.7	4.8	4.35	3.7	2.7	1.8	1.05	1.15	1.3	1.5
28	3.5	3.0	2.55	4.85	4.25	3.6	2.6	1.6	1.1	1.2	1.45	1.55
29	3.55	.....	2.75	4.9	4.3	3.7	2.75	1.5	1.4	.9	1.4	1.6
30	3.7	.....	2.95	4.85	4.3	3.65	2.8	1.55	1.05	.85	1.6	1.6
31	3.5	.....	3.0	......	4.4	......	2.5	1.45	......	.7	......	1.65

December 6, 1905, to January 15, 1906, lake closed, ice from 0.5 to 1.0 foot thick. January 20 to February 2, lake open. February 3, lake frozen over, no ice in channel near gage; ice about 0.3 foot thick above gage near breakwater. February 14, ice 0.65 foot thick below gage, and 0.35 foot thick above gage. March 15, channel open below gage; ice 0.35 foot thick above gage. March 31, ice all out below breakwater.

Rating Table for Richelieu River at Fort Montgomery, N. Y., from January 1, 1905, to December 31, 1906.

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
Feet.	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*
0.00	3,300	1.90	9,760	3.80	16,640	5.60	24,620
.10	3,640	2.00	10,100	3.90	17,020	5.70	25,140
.20	3,980	2.10	10,440	4.00	17,400	5.80	25,660
.30	4,320	2.20	10,780	4.10	17,820	5.90	26,180
.40	4,660	2.30	11,120	4.20	18,240	6.00	26,700
.50	5,000	2.40	11,460	4.30	18,660	6.20	27,860
.60	5,340	2.50	11,800	4.40	19,080	6.40	29,020
.70	5,680	2.60	12,160	4.50	19,500	6.60	30,220
.80	6,020	2.70	12,520	4.60	19,940	6.80	31,460
.90	6,360	2.80	12,880	4.70	20,380	7.00	32,700
1.00	6,700	2.90	13,240	4.80	20,820	7.20	34,020
1.10	7,040	3.00	13,600	4.90	21,260	7.40	35,340
1.20	7,380	3.10	13,980	5.00	21,700	7.60	36,700
1.30	7,720	3.20	14,360	5.10	22,180	7.80	38,100
1.40	8,060	3.30	14,740	5.20	22,660	8.00	39,500
1.50	8,400	3.40	15,120	5.30	23,140	8.20	40,980
1.60	8,740	3.50	15,500	5.40	23,620	8.40	42,460
1.70	9,080	3.60	15,880	5.50	24,100	8.60	43,940
1.80	9,420	3.70	16,260				

The above table is based on measurements made at Chambly dam in 1898 by the U. S. Board on Deep Waterways.

Mean Daily Discharge, Second feet, of Richelieu River at Fort Montgomery, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	10,300	15,700	13,600	14,000	20,400	18,700	15,500	11,800	8,400	7,040	5,680	8,400
2	10,800	15,100	13,800	14,200	20,600	18,400	16,100	11,800	8,740	7,210	6,020	8,400
3	10,600	15,500	13,600	14,400	20,400	18,200	15,100	11,800	8,400	7,040	6,360	8,400
4	11,100	16,300	13,600	14,400	20,600	17,800	15,200	12,000	8,230	7,040	6,020	8,060
5	11,000	14,900	13,800	14,200	20,200	17,600	15,100	11,800	8,740	7,040	5,850	8,060
6	11,100	14,700	14,200	14,400	19,900	17,800	15,100	11,600	9,250	7,890	6,020	8,060
7	11,000	14,600	14,400	14,600	19,500	17,400	14,900	11,120	8,740	6,700	5,680	8,230
8	10,800	14,700	14,000	14,700	19,500	18,000	14,700	11,000	8,400	6,870	5,850	8,400
9	11,000	14,200	13,800	15,100	20,200	17,800	15,100	11,000	8,570	8,400	5,680	8,400
10	11,100	14,400	13,800	15,100	19,500	18,000	14,600	11,500	8,400	6,360	5,850	8,400
11	11,000	14,400	13,800	15,300	19,100	17,600	14,400	12,200	8,570	6,360	6,020	8,400
12	10,800	14,200	13,600	15,500	20,400	17,800	14,400	11,500	8,910	6,020	5,680	8,400
13	10,400	13,800	13,800	15,700	20,200	17,600	14,700	11,100	9,420	6,700	5,850	8,570
14	10,600	13,600	13,400	17,800	19,700	17,800	14,200	10,300	8,230	6,360	6,020	8,400
15	10,800	13,600	13,200	17,000	20,200	17,400	14,600	9,930	7,720	6,360	6,020	8,740
16	11,500	14,000	13,100	16,600	20,400	17,800	14,400	10,100	8,230	5,850	6,020	8,230
17	11,400	13,800	13,100	17,400	20,200	17,800	13,600	10,600	8,400	6,190	6,190	8,400
18	10,800	14,000	12,700	18,400	20,400	17,300	13,600	10,100	8,060	6,020	6,870	8,060

Mean Daily Discharge, Second-feet, of Richelieu River at Fort Montgomery, N Y.—Cont'd.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
19	10,400	13,600	12,900	18,700	19,700	16,800	13,800	10,100	7,720	6,700	6,530	8,230
20	11,500	14,000	12,500	19,300	19,500	16,400	14,200	9,930	7,720	5,850	7,040	8,230
21	11,000	14,200	12,900	19,900	19,100	16,400	13,600	9,760	7,380	5,850	7,210	8,060
22	11,100	13,600	12,300	20,400	19,100	16,100	13,400	9,420	7,380	6,020	7,380	8,400
23	11,600	13,800	12,000	20,600	19,100	15,900	12,900	9,080	7,210	6,360	7,380	8,400
24	13,400	14,400	11,900	20,600	18,700	15,900	12,700	8,910	7,040	6,360	7,380	8,400
25	14,400	14,000	11,800	21,000	18,900	16,100	12,200	9,760	7,380	6,190	7,890	8,230
26	15,500	13,800	12,000	21,300	19,300	16,400	12,700	9,590	8,060	6,360	8,060	8,230
27	15,900	13,800	12,500	20,800	18,900	16,300	12,500	9,420	6,870	7,210	7,720	8,400
28	15,500	13,600	12,000	21,000	18,400	15,900	12,200	8,740	7,040	7,380	8,230	8,570
29	15,700	......	12,700	21,300	18,700	16,300	12,700	8,400	8,060	6,360	8,060	8,740
30	16,300	......	13,400	21,000	18,700	16,100	12,900	8,577	6,870	6,190	8,740	8,740
31	15,500	......	13,600	......	19,100	......	11,800	8,230	......	5,680	......	8,910

Monthly Discharge of Richelieu River at Fort Montgomery, N. Y.
[Drainage area, 7,750 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1906.					
January	16,300	10,300	12,000	1.55	1.79
February	16,300	13,600	14,300	1.85	1.93
March	14,400	11,800	13,200	1.70	1.96
April	21,300	14,000	17,500	2.26	2.52
May	20,600	18,700	19,600	2.53	2.92
June	18,700	15,900	17,200	2.22	2.48
July	16,100	11,800	14,000	1.81	2.09
August	12,200	8,230	10,400	1.34	1.54
September	9,420	6,870	8,070	1.04	1.16
October	8,400	5,680	6,580	.849	.98
November	8,740	5,680	6,650	.858	.96
December	8,910	8,060	8,370	1.08	1.24
The year	21,300	5,680	12,300	1.59	21.57

WOOD CREEK AT WHITEHALL, WASHINGTON COUNTY, N. Y.

A record of the stage of Wood creek has been kept since September 19, 1904, when a gage was established above the stone dam of the Champlain silk-mills, by D. B. LaDu of this Department. The gage board is fastened to retaining wall on east side of creek, about seventy feet above the dam and directly under Clinton avenue bridge. The gage is graduated in feet and tenths and is read twice daily by S. H. Pearson. The zero of gage is placed at same elevation as crest of dam, the elevation of which is 107.5, Barge canal datum.

The dam has a flat crest four feet wide, and total length of spillway is eighty-three feet. There is an additional spillway on west side of creek at elevation 113.6, which is seventy-nine feet long.

There are five openings with gates in breast wall, but only two are used at present for supplying the silk-mill; the other three are now used as waste-gates and are seldom open.

A description of the drainage basin of Wood creek and Mettawee river will be found in the State Engineer and Surveyor's Report for 1904, pages 535–547.

A gage has been maintained below the dam at Whitehall by this Department since January 22, 1905, giving a record of the fluctuation of Lake Champlain. The stage has been observed twice each day and the appended table shows the mean of these observations reduced to elevation of water-surface.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Wood Creek, under Clinton Avenue Bridge, at Whitehall, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	......	......	......	......	......	110.0	109.2	108.9
2	......	......	......	......	......	......	......	......	......	......	109.2	108.8
3	......	......	......	......	......	......	......	......	......	108.8	109.2	108.7
4	......	......	......	......	......	......	......	......	......	108.9	109.2	108.6
5	......	......	......	......	......	......	......	......	......	108.9	109.1	108.6
6	......	......	......	......	......	......	......	......	......	108.9	109.1	108.6
7	......	......	......	......	......	......	......	......	......	108.7	108.9	108.5
8	......	......	......	......	......	......	......	......	......	108.7	108.7	108.5
9	......	......	......	......	......	......	......	......	......	108.7	108.7	108.4
10	......	......	......	......	......	......	......	......	......	108.8	108.8	108.3
11	......	......	......	......	......	......	......	......	......	109.2	108.7	108.4
12	......	......	......	......	......	......	......	......	......	109.5	108.8	108.4
13	......	......	......	......	......	......	......	......	......	109.3	108.8	108.3
14	......	......	......	......	......	......	......	......	......	109.3	109.0	108.4
15	......	......	......	......	......	......	......	......	......	108.9	109.0	108.4
16	......	......	......	......	......	......	......	......	......	108.9	109.1	108.4
17	......	......	......	......	......	......	......	......	......	109.0	109.0	108.4
18	......	......	......	......	......	......	......	......	......	108.9	108.9	108.3
19	......	......	......	......	......	......	......	......	108.4	108.8	108.9	108.4
20	......	......	......	......	......	......	......	......	108.4	108.8	108.8	108.4
21	......	......	......	......	......	......	......	......	108.5	110.0	108.8	108.3
22	......	......	......	......	......	......	......	......	108.3	111.7	108.9	108.3
23	......	......	......	......	......	......	......	......	108.3	110.9	109.0	108.4
24	......	......	......	......	......	......	......	......	108.3	110.4	108.9	108.4
25	......	......	......	......	......	......	......	......	......	109.7	109.1	108.4
26	......	......	......	......	......	......	......	......	108.7	109.6	109.1	108.5
27	......	......	......	......	......	......	......	......	108.9	110.0	109.0	108.5
28	......	......	......	......	......	......	......	......	108.8	109.7	109.0	109.9
29	......	......	......	......	......	......	......	......	109.2	109.5	108.9	110.5
30	......	......	......	......	......	......	......	......	110.1	109.4	108.9	110.0
31	......	......	......	......	......	......	......	......	......	109.3	......	109.5

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Wood Creek, under Clinton Avenue Bridge, at Whitehall, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	109.3	108.3	108.4	113.5	109.4	109.2	110.0	109.8	109.2	109.3	109.0	110.2
2	109.3	108.4	108.4	112.3	109.4	109.0	110.2	109.4	109.1	109.3	109.0	110.0
3	109.1	108.3	108.4	111.3	109.4	109.1	110.5	109.4	110.0	109.4	109.0	110.4
4	108.6	108.3	108.4	111.1	109.4	109.1	110.2	109.2	110.5	109.4	109.0	111.4
5	108.4	108.3	108.4	111.2	109.7	109.0	109.8	109.1	110.4	109.3	109.0	110.7
6	108.4	108.3	108.4	111.8	109.5	109.2	109.5	109.0	110.3	109.2	109.2	110.4
7	109.3	108.3	108.4	112.2	109.5	109.4	109.4	109.0	110.2	109.1	109.5	110.3
8	110 6	108 2	108.4	112.4	109.6	109.4	109.5	108.8	109.6	109.1	109.4	110.3
9	110.2	108.2	108.4	111.1	109.6	109.3	109.4	108.8	109.4	109.0	109.4	110.0
10	109.6	108.1	108.4	111.6	109.6	109.3	109.4	108.7	109.3	109.0	109.3	109.8
11	109.0	108.1	108.4	110.7	109.5	109.3	109.2	108.8	108.9	109.0	109.3	109.6
12	109.1	108.1	108.4	111.4	109.5	109.3	109.1	108.8	109.2	109.1	109.3	109.4
13	109.2	108.2	108.4	111.2	109.4	109.3	109.1	108.7	109.4	109.3	109.2	109.4
14	109.3	108.4	108.4	110.8	109.5	109.4	109.0	108.8	109.3	109.2	109.2	109.3
15	108.4	108.4	108.4	110.5	109.6	109.3	109.0	108.8	109.3	109.2	109.0	109.3
16	108.4	108.4	108.4	110.3	109.6	109.2	109.0	109.2	109.3	109.2	109.3	109.2
17	108.5	108.4	108.5	110.2	109.6	109.3	109.0	109.4	109.2	109.0	109.2	108.9
18	108.8	108.4	110.6	110.2	109.6	109.4	108.9	109.2	110.3	109.0	109.2	109.0
19	108.6	108.4	110.0	110.0	109.4	110.3	108.9	109.0	111.7	109.0	109.2	109.0
20	108.7	108.4	111.8	109.7	109.4	110.2	108.8	109.1	111.6	109.1	109.2	109.1
21	108.7	108.4	110.3	110.3	109.3	110.2	108.9	109.1	112.0	109.0	109.0	109.2
22	108.7	108.3	109.9	110.6	109.3	111.4	108.8	109.0	111.7	109.1	109.0	109.5
23	108.6	108.3	109.5	110.2	109.1	111.0	108.8	109.0	111.1	109.0	109.0	109.8
24	108.6	108.4	111.8	109.9	109.2	110.4	108.8	108.9	110.4	108.8	109.1	109.6
25	108.5	108.4	113.8	109.9	109.1	110.2	108.8	108.9	109.9	108.8	109.1	109.5
26	108.4	108.4	114.1	109.7	109.2	110.8	108.7	109.0	109.7	108.9	109.2	109.6
27	108.4	108.5	114.1	109.6	109.3	111.4	108.6	109.1	109.5	108.9	109.1	109.6
28	108.4	108.5	114.1	109.6	109.3	111.4	108.7	109.1	109.5	108.9	109.2	109.5
29	108.5	......	114.1	109.5	109.2	110.6	108.9	109.0	109.4	109.0	109.5	109.8
30	108.5	......	114.1	109.5	109.3	110.6	108.4	109.0	109.3	109.0	110.6	110.4
31	108.4	......	114.0	......	109.3	......	110.0	109.2	......	109.1	......	110.1

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Wood Creek, under Clinton Avenue Bridge, at Whitehall, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	109.8	109.6	109.8	111.4	109.6	110.8	110.3	109.0	109.0	108.7	109.3	109.4
2	109.4	109.4	109.4	111.4	109.6	110.5	110.1	108.9	108.9	108.5	109.3	109.4
3	109.4	109.3	109.8	111.0	110.4	110.3	110.0	108.9	108.9	108.6	109.2	109.3
4	109.8	109.1	112.4	110.9	110.5	110.1	110.1	108.8	108.8	108.6	109.1	109.2
5	110.2	109.1	111.3	111.0	110.4	109.9	109.9	108.9	108.7	108.6	109.1	109.1
6	109.8	109.1	112.3	111.1	110.9	109.9	109.7	108.9	108.7	108.1	109.1	109.1
7	109.6	109.1	111.3	111.2	109.8	110 1	109.4	108.8	108.7	108.9	109.0	109.2
8	109.5	109.2	110.4	110.7	109.5	110 6	109.3	108.8	108.7	108.4	108.9	109.3
9	109.4	109.2	110.4	110.8	109.9	110.7	109.3	108.7	108.9	108.8	108.9	109.3
10	109.1	109.2	110.9	110.9	111.1	110.3	109.3	108.7	108.8	108.9	108.9	109.3
11	109.2	109.1	111.2	111.4	110.7	110.5	109.5	108.8	108.4	108.7	109.3	109.3
12	109.5	109.2	110.8	111.4	110.4	110.1	109.4	108.9	108.5	108.9	109.9	109.3
13	109.6	109.4	110.2	111.3	110.4	109.9	109.2	108.8	108.8	108.9	110.3	109.3
14	109.4	109.3	109.8	111.2	110.6	109.9	109.0	108.7	108.7	108.6	109.7	109.3
15	109.3	109.2	109.5	112.4	110.4	109.6	109.1	108.7	108.6	108.7	109.5	......
16	109.8	109.1	109.4	113.4	110.1	109.5	109.0	108.7	108.7	108.7	109.3	109.7
17	110.6	109.2	109.5	112.6	110.7	109.9	108.9	108.5	108.6	108.8	109.3	109.6
18	110.0	109.1	109.5	112.2	110.1	110.8	109.0	108.6	108.4	108.7	109.5	109.5
19	109.6	109.1	109.5	111.3	109.9	110.1	109.0	108.6	107.8	108.7	110.5	109.5
20	109.5	109.2	109.5	111.0	109.9	109.8	108.9	108.5	108.3	109.3	110.6	109.5
21	109.6	109.2	109.4	110.8	109.8	109.5	108.9	108.7	107.9	109.6	110.3	109.6
22	110.8	110.0	109.3	110.7	109.6	109.5	109.0	108.7	108.3	109.3	110.3	109.8
23	111.4	110.6	109.3	110.6	109.4	109.5	108.9	108.6	108.9	109.3	110.1	109.5
24	112.2	110.4	109.2	110.4	109.4	110.1	108.9	108.9	109.0	109.1	109.7	109.4
25	111.6	110.3	109.0	110.1	109.8	109.7	108.9	108.9	108.9	109.2	109.5	109.3
26	111.1	110.6	109.0	110.1	109.7	109.5	108.9	108.8	108.7	109.4	109.7	109.3
27	110.5	111.1	110.4	109.8	111.4	109.3	108.9	109.1	108.7	109.3	109.7	109.3
28	110.3	110.4	113.1	109.8	113.2	109.2	108.9	109.3	108.7	109.3	109.7	109.4
29	109.8	......	112.8	109.7	113.4	109.3	108.9	109.1	108.8	109.3	109.7	109.4
30	109.5	......	112.4	109.6	112.8	109.5	109.0	109.1	108.9	109.4	109.5	109.4
31	109.6	......	111.8	......	111.8	......	109.1	109.1	......	109.5	......	109.4

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mettawee River near Whitehall, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	111.5	111.4	111.5
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	111.4	111.3	110.9
3	.....	.....	.....	.....	.....	.....	.....	.....	.....	111.1	111.2	110.4
4	.....	.....	.....	.....	.....	.....	.....	.....	.....	110.9	111.2	110.6
5	.....	.....	.....	.....	.....	.....	.....	.....	.....	110.8	111.0	110.9
6	.....	.....	.....	.....	.....	.....	.....	.....	.....	110.7	110.9	111.1
7	.....	.....	.....	.....	.....	.....	.....	.....	.....	110.7	110.8	110.8
8	.....	.....	.....	.....	.....	.....	.....	.....	.....	110.6	110.8	110.6
9	.....	.....	.....	.....	.....	.....	.....	.....	.....	110.5	110.7	110.5
10	.....	.....	.....	.....	.....	.....	.....	.....	.....	110.8	110.6	110.5
11	.....	.....	.....	.....	.....	.....	.....	.....	109.2	111.7	110.5	110.4
12	.....	.....	.....	.....	.....	.....	.....	.....	109.3	111.5	110.4	110.4
13	.....	.....	.....	.....	.....	.....	.....	.....	109.2	111.2	110.4	110.3
14	.....	.....	.....	.....	.....	.....	.....	.....	109.2	111.1	110.6	110.4
15	.....	.....	.....	.....	.....	.....	.....	.....	111.3	111.0	110.5	110.3
16	.....	.....	.....	.....	.....	.....	.....	.....	111.2	110.8	110.5	110.2
17	.....	.....	.....	.....	.....	.....	.....	.....	110.3	110.7	110.4	110.2
18	.....	.....	.....	.....	.....	.....	.....	.....	110.4	110.6	110.8	110.2
19	.....	.....	.....	.....	.....	.....	.....	.....	110.2	110.6	110.7	110.2
20	.....	.....	.....	.....	.....	.....	.....	.....	110.2	110.5	110.5	110.2
21	.....	.....	.....	.....	.....	.....	.....	.....	110.4	112.5	110.4	110.2
22	.....	.....	.....	.....	.....	.....	.....	.....	110.2	115.6	111.1	110.2
23	.....	.....	.....	.....	.....	.....	.....	.....	110.1	113.9	111.1	110.2
24	.....	.....	.....	.....	.....	.....	.....	.....	110.1	112.8	110.8	110.5
25	.....	.....	.....	.....	.....	.....	.....	.....	110.5	112.1	110.8	110.3
26	.....	.....	.....	.....	.....	.....	.....	.....	110.8	112.1	110.6	110.2
27	.....	.....	.....	.....	.....	.....	.....	.....	110.9	113.1	110.8	111.0
28	.....	.....	.....	.....	.....	.....	.....	.....	110.7	112.4	111.3	114.7
29	.....	.....	.....	.....	.....	.....	.....	.....	111.3	112.0	111.4	114.7
30	.....	.....	.....	.....	.....	.....	.....	.....	112.8	111.9	111.6	113.3
31	.....	.....	.....	.....	.....	.....	.....	.....	.....	111.5	.....	113.1

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Lake Champlain, West Side of Pier, Foot of Lock No. 23, at Whitehall, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	.....	95.0	94.7	99.3	98.8	97.2	96.8	97.4	96.3	96.8	95.8	95.5
2	.....	94.9	94.6	99.2	98.8	97.0	96.9	97.0	96.4	96.8	95.8	95.7
3	.....	94.8	94.5	98.3	98.6	97.2	97.0	97.1	96.4	96.7	95.8	96.0
4	.....	94.8	94.5	98.8	98.8	97.5	97.2	97.3	96.6	96.6	95.8	96.2
5	.....	94.8	94.6	98.7	98.3	97.2	97.3	97.0	96.8	96.5	95.8	96.5
6	.....	94.8	94.7	99.0	97.9	97.6	97.2	97.4	96.8	96.8	95.8	95.9
7	.....	94.7	94.4	99.0	98.1	97.0	97.2	97.2	96.8	96.5	95.8	95.8
8	.....	94.7	94.5	99.0	98.4	97.0	97.2	97.0	96.8	96.3	95.7	96.0
9	.....	94.8	94.6	98.9	98.2	96.8	97.3	97.1	96.6	96.2	95.7	96.0
10	.....	94.8	94.6	98.8	98.1	96.9	97.3	96.8	96.6	96.2	95.7	96.0
11	.....	94.8	94.6	98.9	97.9	96.9	97.6	96.9	96.4	96.0	95.6	95.9
12	.....	94.8	94.6	98.9	98.1	96.8	97.6	96.8	96.5	96.3	95.6	96.0
13	.....	94.8	94.6	99.0	97.6	96.7	97.2	97.2	96.6	96.0	95.6	96.0
14	.....	94.7	94.6	99.2	97.5	96.4	97.2	97.2	96.8	96.4	95.3	95.9
15	.....	94.7	94.6	99.0	97.5	96.4	97.0	97.0	96.5	96.3	94.6	95.9
16	.....	94.7	94.6	99.0	97.0	96.4	97.0	97.0	96.0	96.3	94.7	95.9
17	.....	94.7	94.6	98.9	97.0	96.4	96.8	97.0	96.1	96.2	94.8	95.6
18	.....	94.6	94.6	99.0	97.1	96.4	96.8	97.1	96.2	96.0	95.0	95.6
19	.....	94.7	94.5	98.6	97.3	96.8	96.8	96.8	96.9	96.2	95.1	95.5
20	.....	94.6	95.5	98.3	97.6	96.6	97.0	96.8	96.8	96.2	95.5	95.6
21	.....	94.7	95.6	98.8	97.8	96.6	96.9	96.5	97.5	96.2	95.6	95.7
22	95.0	94.7	95.4	99.0	98.0	97.0	96.8	96.6	97.4	96.2	95.6	95.8
23	95.0	94.7	95.4	98.9	97.1	97.0	96.6	96.5	97.0	96.1	95.6	95.8
24	95.0	94.7	95.4	98.6	97.0	96.8	96.4	96.4	97.1	96.0	95.1	95.8
25	94.9	94.6	95.6	98.7	96.9	96.2	96.6	96.9	97.6	96.0	95.2	95.8
26	94.9	94.7	99.0	98.8	96.8	97.0	96.5	96.6	97.2	96.1	95.6	95.8
27	95.0	94.7	99.6	98.9	97.2	97.4	96.4	96.6	96.7	96.0	95.6	95.7
28	95.0	94.6	100.2	98.7	97.2	97.2	96.3	96.6	96.4	96.0	95.4	95.6
29	95.0	.....	99.6	98.6	97.3	97.0	96.4	96.3	96.8	96.4	95.2	95.7
30	95.0	.....	99.4	99.0	97.6	96.8	96.6	96.2	96.8	96.0	95.2	95.6
31	95.2	.....	99.6	.....	97.4	.....	97.1	96.7	.....	95.9	.....	95.6

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Lake Champlain, West Side of Pier, Foot of Lock No. 23, at Whitehall, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	95.7	97.1	96.9	97.3	98.75	97.9	97.0	96.0	94.9	94.8	94.8	95.1
2	95.8	97.1	96.7	97.25	98.8	97.8	97.1	96.0	94.9	94.1	95.2	95.2
3	95.9	97.0	96.75	96.95	98.55	98.0	97.0	96.0	95.2	94.6	95.0	95.2
4	95.9	96.9	97.15	96.8	98.6	97.8	97.4	95.8	95.2	94.5	95.0	95.2
5	95.8	96.95	98.0	96.95	98.25	97.8	97.2	95.9	95.0	94.4	95.0	95.2
6	96.5	97.05	97.3	97.05	98.15	97.7	97.0	95.8	94.8	94.6	95.0	95.2
7	95.95	97.9	97.0	97.0	98.35	98.0	97.0	95.8	94.9	94.8	94.8	95.4
8	95.85	96.75	96.8	97.2	98.35	97.5	97.0	95.8	95.0	94.2	94.8	95.4
9	95.9	96.7	96.85	97.05	98.2	97.5	96.8	95.9	94.8	93.4	94.8	95.2
10	95.95	96.7	96.85	97.1	98.1	98.2	96.9	95.8	94.9	94.3	94.8	95.2
11	95.8	96.6	96.9	97.3	98.15	98.4	96.9	95.9	95.0	94.6	94.6	95.2
12	95.75	96.5	96.7	97.4	97.55	97.6	96.8	95.8	94.8	94.6	94.8	95.2
13	95.7	96.35	96.75	97.2	98.0	97.5	96.8	95.8	95.2	94.6	95.0	95.2
14	95.7	96.7	96.75	96.8	98.85	97.6	96.8	95.9	95.0	94.5	94.8	95.2
15	95.7	96.6	96.7	97.6	98.3	97.4	96.7	95.6	95.0	94.6	94.9	......
16	95.75	96.55	96.6	98.7	98.6	97.4	96.5	95.6	95.0	94.8	94.8	95.3
17	95.85	96.55	96.6	98.25	98.55	97.4	96.5	95.4	94.8	94.7	94.8	95.3
18	95.75	96.55	96.45	97.95	98.5	97.7	96.5	95.4	94.8	94.6	94.6	95.2
19	95.85	96.45	96.35	98.2	98.6	97.5	96.5	95.4	94.9	94.4	94.8	95.3
20	95.6	96.4	96.35	98.25	98.75	97.4	96.4	95.4	95.2	94.8	94.8	95.2
21	95.7	96.5	96.25	98.0	98.7	97.3	96.4	95.4	94.9	94.9	94.9	95.3
22	95.61	96.4	96.25	98.55	97.7	97.4	96.3	95.2	94.8	94.8	95.1	95.3
23	96.25	96.45	96.35	99.35	97.75	97.4	96.1	95.5	94.9	94.8	95.0	95.3
24	97.1	96.45	96.35	98.85	97.85	97.4	96.3	95.6	94.9	94.8	95.0	95.4
25	97.6	96.4	96.25	98.75	97.95	97.4	96.4	95.3	94.8	94.7	95.1	95.2
26	97.4	96.65	96.3	98.5	97.65	97.2	96.4	94.9	94.3	94.8	95.0	95.2
27	97.0	97.7	96.4	98.85	98.25	97.2	96.3	94.8	94.2	94.6	95.0	95.1
28	97.0	97.05	96.2	99.15	98.8	97.1	96.2	95.2	94.3	94.3	95.0	95.1
29	97.0	......	97.1	98.5	99.2	97.2	96.0	95.1	94.0	94.6	95.2	95.2
30	97.6	......	97.1	98.3	98.9	97.2	95.8	95.0	94.8	94.8	95.2	95.2
31	97.5	......	97.45	......	98.0	......	95.9	95.0	......	94.8	......	95.3

SARANAC RIVER NEAR PLATTSBURG, N. Y.

Saranac river rises in southeastern Franklin county, N. Y., and flows northeastward to a point near Cadyville and thence eastward into Lake Champlain at Plattsburg. The southern boundary of the basin is the Ampersand mountain range, and the stream drains the north slope of the most elevated region of the State of New York. About 16.2 per cent of the upper drainage area is water-surface. The areas tributary to the river are shown in the following table:

Drainage areas of Saranac River.(a)

LOCATION.	Area.	Total area.
	Square miles.	*Square miles.*
Above Saranac lake State dam	....	157.5
Above Saranac Lake village	44.9	202.4
Above Franklin Falls	104.3	306.7
North branch Saranac river	136.6	136.6
At junction North branch	....	498.8
Above High Falls	19.6	518.4
Above Cadyville	74.6	593.0
Above Kent Falls	2.9	595.9
Above Morrisonville	2.0	597.9
Above Lozier dam	26.1	624.0
Above mouth	5.6	629.6

(a) From Bien's Atlas of New York.

In 1854 a timber dam was built below lower Saranac lake for the purpose of flooding logs. In 1899-1901 a masonry dam and lock were erected by the State at this point, raising the water-level of lower Saranac lake, eighteen inches.

A gaging station was established by Robert E. Horton at the dam of the Plattsburg Electric Light and Power Company, six miles above Plattsburg, March 17, 1903.

The record includes the flow over a straight spillway crest 171.25 feet in length, the discharge through two five-foot waste gates when open, and the discharge through five thirty-three-inch Victor turbines controlled by automatic governors. The gages are read and the record is furnished by A. E. Hare. Experiments have been made at Cornell University hydraulic laboratory on a model of the ogee section of the dam, from which coefficients have been derived for the calculation of the discharge.

Mean Daily Discharge, Second-feet, of Saranac River at Dam near Plattsburg, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	763	994	551	1,100	512	966	1,020	610	381	181	722	686
2	660	828	595	946	775	1,050	1,140	501	72	312	581	210
3	603	742	524	723	488	708	964	477	162	337	550	606
4	718	538	1,100	980	889	1,060	950	509	310	412	206	403
5	770	528	1,300	1,100	1,130	688	994	585	385	330	222	326
6	796	513	977	1,160	1,350	749	958	831	373	242	363	548
7	751	496	781	961	1,120	893	806	520	447	80	390	313
8	547	554	654	842	877	739	800	599	338	336	537	550
9	582	539	613	782	882	1'020	1,160	484	106	617	384	156
10	518	624	639	811	785	861	1,000	390	491	471	394	264
11	518	714	546	799	754	1,040	1,210	319	447	434	70	411
12	*a*	760	416	663	769	980	835	*a*	305	417	479	368
13	299	671	510	738	1,350	1,020	513	356	335	478	346	359
14	554	660	532	1,130	2,120	898	445	399	426	136	307	492
15	403	554	502	1,880	2,090	863	278	539	291	400	286	492
16	717	539	363	1,710	1,820	844	316	476	62	417	408	458
17	572	562	321	1,550	1,520	762	333	438	224	491	487	706
18	496	695	329	1,790	1,600	945	506	330	395	437	109	809
19	496	678	376	1,500	1,260	795	202	*a*	419	382	843	403
20	497	479	348	1,270	1,100	609	314	648	381	364	564	453
21	748	940	374	1,340	984	704	421	296	404	42	898	383
22	1,770	1,510	318	1,060	930	1,000	*a*	365	415	246	755	423
23	2,260	1,130	372	1,110	694	1,160	430	276	128	398	870	382
24	2,940	1,050	368	1,040	928	587	580	338	185	476	742	275
25	2,350	1,200	419	731	1,280	647	493	339	411	597	321	454
26	1,820	1,610	534	576	1,250	376	514	*a*	372	680	848	456
27	1,700	1,030	878	740	1,250	613	638	*a*	265	628	648	491
28	1,880	602	1,640	710	1,080	502	656	324	309	328	784	400
29	1,450	......	1,450	674	1,110	482	170	338	287	557	906	530
30	1,150	......	1,450	614	1,020	540	514	309	210	556	465	308
31	1,010	......	1,530	......	1,000	......	544	325	......	637	......	286

a Record incomplete.

NOTE.—During January, February, March and December dam is more or less obstructed by ice and estimates are approximate.

Monthly Discharge of Saranac River at Dam near Plattsburg, N. Y.
[Drainage area, 624 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1906.					
January	2,940	299	1,010	1.61	1.86
February	1,610	513	776	1.24	1.29
March	1,640	318	687	1.10	1.27
April	1,790	576	1,030	1.65	1.84
May	2,090	488	1,120	1.79	2.06
June	1,160	376	803	1.28	1.43
July	1,210	170	657	1.05	1.21
August	831	276	442	.707	0.818
September	491	52	311	.498	0.559
October	680	42	401	.642	0.742
November	906	70	516	.826	0.918
December	809	156	430	.688	0.789
The year	1,350	278	682	1.09	1.23

LAKE GEORGE OUTLET AT TICONDEROGA, N. Y.

Lake George occupies a valley extending in a northeast-southwest direction, between Schroon river on the west and the south arm of Lake Champlain on the east. The lake has an average width of from one to two miles, contains numerous islands, and has precipitous, forest-covered slopes reaching to the shore on either side. The inflow is through small tributaries in deep-cut gullies on the side slopes. The lake lies at an elevation of 323 feet above tide, and the adjacent hills rise to elevations ranging between 1,200 and 2,000 feet within one to two miles of the lake margin. Aside from the main lake there is but little water-surface within the drainage basin. The total area tributary to the lake above its outlet is 220 square miles, 20.5 per cent (forty-five square miles) of which is water-surface.[a]

The outlet of Lake George is a stream three miles long, entering Lake Champlain at Fort Ticonderoga. This stream leaves Lake George at a distance of 1.5 miles from Lake Champlain and at an elevation 220 feet greater. It makes an abrupt bend, in which occur, naturally, several cascades over rock. The water-power is at present developed by dams located successively along the stream, the uppermost dam controlling the outflow from Lake George.

A gaging station was established by Robert E. Horton, August

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[a] The drainage basin of Lake George is shown on the Glens Falls, Bolton, Whitehall, Ticonderoga and adjacent topographic atlas sheets of the United States Geological Survey.

24, 1904, at the "B" mill of the International Paper Company at Ticonderga. This is the second dam below Lake George.

The dam is of masonry, is without leakage, and has a horizontal crest six feet in breadth and substantially level.

Observations of the depth on the crest of the dam and in the tail-race are taken four times each day by C. E. Carpenter. The discharge through the turbines is determined from current-meter measurements in the tail-race below the pulp mill.

ST. LAWRENCE RIVER DRAINAGE.

GENERAL FEATURES.

St. Lawrence river receives the flow of a number of New York streams having their sources in a northerly slope of the Adirondacks and fed by the innumerable lakes with which the region is dotted. Some of these rivers, as the Grass, Raquette and St. Regis, lie entirely within the United States; others, notably Salmon, Trout, Chateaugay and English rivers, cross the international boundary and flow northward into the St. Lawrence in Canada, as does also Richelieu river, the outlet of Lake Champlain. The following table gives a list of the principal tributaries of the St. Lawrence in the United States, with the areas drained by them:

Drainage areas of St. Lawrence River tributaries in the United States.

	Square miles.		Square miles.
Oswegatchie river	1,609	Salmon river *a*	273
Grass river	637	Trout river *b*	129
Raquette river	1,219	Chateaugay river *b*	199
St. Regis river	910	English river *b*	53
Little Salmon river *a*	103	Lake Champlain *b*	8,187

a Above junction near international boundary. *b* Above New York State line.

The St. Lawrence drains, through Lake Champlain, an area of 4,560 square miles in the State of Vermont. This drainage is practically all from Missisquoi, Lamoille and Winooski rivers and Otter creek.

OSWEGATCHIE RIVER NEAR OGDENSBURG, N. Y.

Oswegatchie river has its source in the region of lakes and timbered swamps in the southern part of St. Lawrence county, N. Y. The largest of the lakes is Cranberry lake, which affords valuable storage to water-power users on its outlet, East branch of Oswegatchie river. East and west branches flow in a general northwesterly direction and unite near Talcville. From Gouverneur to

Oxbow the river flows southwestward; it then turns sharply and flows northeastward to Rensselaer Falls, turns again to the northwest, receives the outlet of Black lake at Galilee, and finally enters the St. Lawrence at Ogdensburg.

The gaging station was established May 16, 1903, by Robert E. Horton. It is located at Eel weir bridge, just below the junction of Oswegatchie river and Black lake outlet.

The channel is in rock and is partly artificial, rock underneath the bridge having been removed by blasting to increase the bridge opening. The bridge consists of two spans, the right being 129.6 feet long and the left 130.1 feet.

Discharge measurements are made from the down-stream side of the bridge. The initial point for soundings is the top of the face of the right abutment, down-stream side.

A standard chain gage, which is observed twice daily by Joseph H. La Rue, is attached to the ironwork of the bridge on the up-stream side of the right-hand span. The bench-mark is a square chisel draft on the up-stream side of the right-hand abutment; elevation, 16.72 feet above gage datum.

Mean Daily Gage Height, in Feet, of Oswegatchie River near Ogdensburg, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	7.2	7.0	5.75	6.8	5.55	5.2	4.9	4.7	4.5	4.65	6.4	6.6
2	7.4	6.85	5.4	6.65	5.4	5.1	4.9	4.7	4.5	4.7	6.35	6.55
3	7.3	6.5	5.25	6.5	5.5	5.1	4.85	4.7	4.5	4.75	6.15	6.45
4	7.2	6.15	5.25	6.55	5.55	5.0	4.9	4.95	4.5	4.8	6.0	6.25
5	7.2	6.0	5.6	6.3	5.5	5.0	5.05	5.1	4.55	4.8	5.95	6.05
6	7.1	5.9	5.7	6.1	5.7	4.9	5.3	5.3	4.75	4.95	5.85	5.9
7	7.1	5.7	5.7	6.05	5.65	4.8	5.45	5.35	4.9	5.1	5.7	5.9
8	7.1	5.55	5.65	5.9	5.55	5.25	5.55	5.2	4.9	5.3	5.7	5.95
9	6.85	5.45	5.55	5.9	5.55	5.75	5.55	5.1	4.85	5.75	5.7	5.95
10	6.8	5.4	5.45	5.9	5.5	6.2	5.5	5.0	4.8	5.75	5.55	5.8
11	6.65	5.3	5.4	5.95	5.5	6.4	5.5	5.0	4.8	5.75	5.4	5.8
12	6.4	5.2	5.25	6.1	5.4	6.5	5.4	4.8	4.8	6.0	5.4	5.8
13	6.35	5.1	5.2	6.15	5.4	6.6	5.4	4.8	4.8	6.1	5.65	5.65
14	6.2	5.1	5.2	6.3	5.35	6.5	5.4	4.8	4.8	6.1	5.65	5.5
15	6.05	5.1	5.15	6.2	5.55	6.4	5.4	4.75	4.8	6.15	5.4	5.55
16	5.9	5.0	5.1	6.25	5.6	6.35	5.4	4.75	4.8	6.1	5.45	5.5
17	5.9	5.0	5.1	6.25	5.95	6.15	5.3	4.7	4.8	6.1	5.4	5.7
18	5.85	4.9	5.1	6.35	5.95	6.0	5.2	4.7	4.7	6.05	5.45	5.95
19	6.1	4.9	5.1	6.45	5.9	6.0	4.95	4.6	4.7	6.0	5.65	6.15
20	5.85	4.9	5.0	6.5	5.85	5.8	4.9	4.6	4.7	6.1	5.7	5.9
21	5.85	5.0	5.0	6.5	5.85	5.65	4.9	4.6	4.6	6.1	5.7	5.8
22	6.3	5.2	4.95	6.35	5.65	5.55	4.9	4.55	4.6	6.55	6.6	5.6
23	7.15	5.65	4.9	6.3	5.6	5.4	4.9	4.45	4.6	6.65	6.45	5.8
24	7.45	5.7	4.85	6.3	5.55	5.4	4.8	4.4	4.6	6.65	6.35	5.5
25	7.8	5.8	4.75	6.25	5.4	5.4	4.8	4.4	4.6	6.7	6.35	5.6
26	7.9	5.9	4.7	6.2	5.4	5.3	4.8	4.5	4.6	6.7	6.3	5.4
27	8.1	5.85	5.0	6.2	5.15	5.15	4.8	4.5	4.6	6.6	6.3	5.3
28	7.95	5.85	5.5	6.0	5.2	5.1	4.7	4.5	4.6	6.7	6.35	5.3
29	7.9	......	6.1	5.9	5.2	5.1	4.7	4.5	4.75	6.65	6.5	5.3
30	7.55	......	6.65	5.9	5.25	4.9	4.7	4.5	4.7	6.45	6.55	5.3
31	7.3	......	6.8	......	5.2	......	4.7	4.5	......	6.3	......	5.3

Owing to swiftness of the current this river never freezes over at the gage. There is occasional backwater from ice forming on rifts about one-half mile below station.

Current Meter Discharge Measurements of Oswegatchie River near Ogdensburg, N. Y.

DATE.	Hydrographer.	Width.	Area of section.	Gage height.	Discharge.
1906.		*Feet.*	*Square feet.*	*Feet.*	*Second-feet.*
April 19	C. C. Covert	267	854	6.60	5,430
April 20	C. C. Covert	267	842	6.60	5,380
Aug. 16	Covert and Weeks	240	377	4.90	987
Oct. 27	Barrows and Covert	254	814	6.61	4,640

Rating Table for Oswegatchie River near Ogdensburg, N. Y.

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge
Feet.	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*
4.40	590	5.50	2,180	6.60	5,185	8.40	10,570
4.50	680	5.60	2,400	6.70	5,480	8.60	11,180
4.60	780	5.70	2,640	6.80	5,775	8.80	11,790
4.70	890	5.80	2,890	6.90	6,070	9.00	12,400
4.80	1,010	5.90	3,160	7.00	6,365	9.20	13,020
4.90	1,140	6.00	3,440	7.20	6,955	9.40	13,640
5.00	1,280	6.10	3,730	7.40	7,550	9.60	14,260
5.10	1,440	6.20	4,020	7.60	8,150	9.80	14,880
5.20	1,610	6.30	4,310	7.80	8,750	10.00	15,500
5.30	1,790	6.40	4,600	8.00	9,350	......	....
5.40	1,980	6.50	4,890	8.20	9,960	......	....

The above table is applicable only for open channel conditions. It is based upon 19 discharge measurements made during 1903 to 1906. It is fairly well defined.

Mean Daily Discharge, Second-feet, of Oswegatchie River near Ogdensburg, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1903.												
1					1,520	590	1,790	2,290	1,010	680	2,400	1,440
2					1,440	590	1,790	2,890	1,010	680	2,080	1,280
3					1,360	635	1,440	2,890	1,010	680	1,880	1,280
4					1,210	590	1,440	2,890	1,010	780	1,700	1,140
5					890	590	1,520	2,890	1,010	730	1,610	1,010
6					890	590	1,440	2,890	1,010	680	1,280	890
7					890	590	1,360	2,890	950	780	1,520	890
8					890	590	1,440	2,890	890	780	1,980	890
9					890	590	1,360	2,890	890	780	2,180	890
10					1,080	680	1,280	2,890	890	1,010	1,980	890
11					1,010	590	1,210	2,890	890	1,700	1,980	890
12					1,010	590	1,280	2,890	780	2,760	1,880	890
13					1,010	680	1,075	2,890	780	4,890	1,790	890
14					780	835	950	2,640	780	5,330	1,610	890
15					835	1,080	890	2,890	780	5,480	1,520	950
16					890	1,280	890	2,180	780	5,480	1,010	890
17					890	1,980	890	2,080	890	5,330	1,610	890
18					835	1,980	835	1,980	950	4,890	1,610	890
19					885	1,880	780	1,790	890	4,890	1,610	890
20					890	1,610	680	1,700	890	5,040	1,610	890
21					835	1,280	780	1,360	890	4,890	1,520	890
22				4,020	680	1,360	780	1,525	890	4,890	1,610	890
23				3,580	680	1,440	835	1,010	890	4,890	1,610	890
24				3,020	635	1,790	1,010	1,010	890	4,740	1,610	890
25				2,640	680	1,980	1,075	1,010	890	4,600	1,440	1,010
26				2,400	730	2,180	1,010	1,010	835	4,160	1,440	1,360
27				2,400	780	2,180	1,140	1,010	780	3,580	1,440	1,610
28				2,290	1,010	2,080	1,210	950	780	2,890	1,440	1,440
29				1,880	730	1,790	1,610	1,010	680	2,760	1,440	1,360
30				1,790	590	1,790	1,700	1,010	680	2,520	1,440	1,440
31					590		1,790	1,010		2,400		1,440

Mean Daily Discharge, Second-feet, of Oswegatchie River near Ogdensburg, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	1,440	1,980	1,610	14,300	5,480	2,080	780	1,280	1,280	4,020	2,890	780
2	1,440	1,980	1,790	13,800	5,480	2,180	780	1,280	1,210	4,600	2,640	780
3	1,280	1,980	1,790	13,000	5,330	2,520	835	1,140	1,280	5,180	2,640	835
4	1,140	1,700	1,790	12,600	5,180	2,180	1,010	1,140	1,280	5,180	2,400	890
5	1,140	1,440	1,980	11,300	4,890	2,180	1,010	1,140	1,280	5,180	2,180	890
6	1,010	1,280	2,080	10,300	4,600	2,180	1,010	1,140	1,610	4,740	2,290	890
7	835	1,280	2 290	9,960	4,460	1,980	1,010	1,010	1,880	4,310	2,400	835
8	780	1,280	3,580	9,350	4,160	1,980	1,280	1,010	1,790	3,580	2,180	780
9	780	1,280	5,480	9,050	3,730	1,790	1,610	1,010	1,610	3,880	1,980	780
10	780	1,280	7,550	9,200	3,580	1,700	1,520	950	1,440	4,310	1,980	780
11	835	1,520	7,400	9,200	3,300	1,610	1,280	890	1,440	2,520	1,790	780
12	890	1,880	7,850	9,500	2,290	1,360	1,010	890	1,440	2,180	2,080	835
13	890	1,790	6,960	9,050	2,180	1,280	1,010	835	1,360	2,400	1,280	835
14	890	1,590	7,250	9,050	2,180	1,280	1,010	835	1,140	2,400	1,010	835
15	890	1,610	6,660	8,300	2,180	1,280	1,010	780	1,140	2,290	1,010	835
16	890	1,610	5,920	7,550	2,080	1,010	890	780	1,140	2,180	1,010	890
17	890	1,610	5,180	7,250	1,790	890	890	780	1,140	2,180	1,010	780
18	890	1,610	4,160	6,660	1,790	890	950	780	1,140	2,080	950	780
19	890	1,610	3,300	5,920	1,790	890	1,010	780	1,140	1,980	890	780
20	890	1,610	2,890	4,740	2,400	890	1,010	680	1,140	1,980	890	680
21	835	1,610	3,020	4,600	3,020	890	1,010	680	1,210	2,180	950	680
22	890	1,610	2,400	4,310	3,730	780	1,010	680	1,280	2,290	890	680
23	890	1,520	3,160	5,040	3,580	780	1,010	680	1,280	2,080	890	680
24	1,075	1,700	5,330	4,600	3,440	835	1,080	835	1,360	2,290	890	680
25	1,700	1,790	6,960	4,600	3,440	890	1,280	1,080	1,140	2,400	890	680
26	2,890	1,790	10,100	4,310	3,300	890	1,360	1,280	1,140	2,400	890	680
27	3,730	1,610	12,900	4,160	3,020	835	1,440	1,440	1,440	2,640	890	780
28	3,880	1,610	14,300	4,160	2,400	890	1,440	1,520	2,080	2,640	890	890
29	3,160	1,610	15,300	4,890	2,180	890	1,610	1,440	2,290	2,890	835	1,010
30	2,640	......	15,200	5,180	2,180	835	1,440	1,440	3,730	2,640	780	1,520
31	2,080	......	14,400	......	1,980	......	1,280	1,440	......	2,760	......	1,440

Mean Daily Discharge, Second-feet, of Oswegatchie River near Ogdensburg, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	1,360	835	680	15,800	2,640	2,180	4,750	2,400	1,520	1,010	2,080	3,160
2	1,790	835	680	15,600	2,640	2,080	4,890	2,640	1,360	1,010	1,980	3,300
3	3,730	890	680	14,900	2,400	2,080	5,480	2,640	1,520	1,010	1,790	3,440
4	5,630	890	680	14,100	2,400	1,880	5,480	2,640	1,700	1,010	1,790	3,160
5	4,310	890	680	13,000	3,160	1,790	5,480	2,640	1,980	1,010	1,700	3,160
6	2,760	890	680	12,700	3,160	1,790	5,180	2,520	2,180	1,010	1,610	3,160
7	2,640	890	680	11,500	4,160	1,790	4,750	2,290	2,290	1,080	1,980	3,160
8	2,640	890	680	10,400	3,300	2,180	4,170	1,980	2,400	1,140	2,080	3,160
9	2,290	890	680	9,960	3,300	3,300	3,730	1,790	2,400	1,140	2,640	3,160
10	1,790	890	680	9,500	3,160	3,440	3,590	1,880	2,400	1,140	2,760	2,760
11	1,700	835	680	8,750	3,160	4,310	2,890	1,980	2,290	1,140	2,890	2,640
12	1,790	780	680	7,850	3,160	4,460	2,640	1,980	1,980	1,010	3,160	2,640
13	1,790	780	680	7,550	3,160	4,740	2,400	1,880	1,980	1,280	2,890	2,640
14	1,700	780	680	6,960	3,020	5,180	2,290	1,700	1,880	1,280	2,890	2,520
15	1,610	780	680	6,960	3,160	5,180	1,980	1,440	1,790	1,610	3,160	2,080
16	1.440	780	680	6,510	3,160	5,180	1,880	1,520	1,790	2,180	2,890	1,980
17	1.280	780	680	6.070	3.160	5.180	1.790	1.880	1.610	2.180	2.400	1.980
18	1,280	780	680	5,480	3,160	5,480	1,880	2,400	1,440	1,980	1,980	1,980
19	1,280	780	890	5,480	3,160	5,480	1,700	3,160	1,440	1,980	1,980	1,880
20	1,280	780	1,980	4,310	2,890	5,480	1,440	3,590	1,440	3,160	1,880	1,610
21	1,280	780	2,400	3,300	3,160	5,480	1,440	3,730	1,440	2,640	1,790	1,440
22	1,280	780	3,020	3,440	3,160	5,480	1,610	3,440	1,440	1,880	1,790	1,980
23	1,280	680	3,300	3,020	3,160	5,330	1,610	2,760	1,440	2,080	1,790	2,290
24	1,280	680	4,890	3,160	3,020	5,040	1,610	2,640	1,790	2,180	2,080	3,020
25	1,280	680	6,955	3,300	2,760	4,600	1,700	2,520	1,790	2,180	1,880	3,880
26	1,280	680	9,200	3,160	2,640	3,730	1,520	1,980	1,520	2,400	1,790	4,310
27	1,210	680	11,940	3,020	2,640	4,020	1,610	1,980	1,140	2,400	1,790	4,600
28	1,010	680	13,500	2,760	2,640	4,310	1,520	1,980	1,140	2,400	1,790	4,600
29	950	......	14,600	2,890	2,640	4,310	1,440	1,980	1,140	1,980	2,400	4,740
30	890	......	15,600	2,760	2,400	4,600	1,440	1,880	1,140	1,980	2,640	5,780
31	890	......	15,800	......	2,180	......	1,880	1,790	......	1,980	......	6,660

Mean Daily Discharge, Second feet, of Oswegatchie River near Ogdensburg, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	6,960	6,360	2,760	5,780	2,290	1,610	1,140	890	680	835	4,600	5,180
2	7,550	5,920	1,980	5,330	1,980	1,440	1,140	890	680	890	4,460	5,040
3	7,250	4,890	1,700	4,890	2,180	1,440	1,080	890	680	950	3,880	4,750
4	6,960	3,880	1,700	5,040	2,290	1,280	1,140	1,210	680	1,010	3,440	4,160
5	6,960	3,440	2,400	4,310	2,180	1,280	1,360	1,440	730	1,010	3,300	3,580
6	6,660	3,160	2,640	3,730	2,640	1,140	1,790	1,790	950	1,210	3,020	3,160
7	6,660	2,640	2,640	3,590	2,520	1,010	2,080	1,880	1,140	1,440	2,640	3,160
8	6,660	2,290	2,520	3,160	2,290	1,700	2,290	1,610	1,140	1,790	2,640	3,300
9	5,920	2,080	2,290	3,160	2,290	2,760	2,290	1,440	1,080	2,760	2,640	3,300
10	5,780	1,980	2,080	3,160	2,180	4,020	2,180	1,280	1,010	2,760	2,290	2,890
11	5,330	1,790	1,980	3,300	2,180	4,600	2,180	1,280	1,010	2,760	1,980	2,890
12	4,600	1,610	1,700	3,730	1,980	4,890	1,980	1,010	1,010	3,440	1,980	2,890
13	4,460	1,440	1,610	3,880	1,980	5,180	1,980	1,010	1,010	3,730	2,520	2,520
14	4,020	1,440	1,610	4,310	1,880	4,890	1,980	1,010	1,010	3,730	2,520	2,180
15	3,580	1,440	1,520	4,020	2,290	4,600	1,980	950	1,010	3,880	1,980	2,290
16	3,160	1,280	1,440	4,170	2,400	4,460	1,980	950	1,010	3,730	2,080	2,180
17	3,160	1,280	1,440	4,170	3,300	3,880	1,790	890	1,010	3,730	1,980	2,640
18	3,020	1,140	1,440	4,460	3,300	3,440	1,610	890	890	3,590	2,080	3,300
19	3,730	1,140	1,440	4,740	3,160	3,440	1,210	780	890	3,440	2,520	3,880
20	3,020	1,140	1,280	4,890	3,020	2,890	1,140	780	890	3,730	2,640	3,160
21	3,020	1,280	1,280	4,890	3,020	2,520	1,140	780	780	3,730	2,640	2,890
22	4,310	1,610	1,210	4,460	2,520	2,290	1,140	780	780	5,040	5,180	2,400
23	6,810	2,520	1,140	4,310	2,400	1,980	1,140	635	780	5,330	4,750	2,890
24	7,700	2,640	1,080	4,310	2,290	1,980	1,010	590	780	5,330	4,460	2,180
25	8,750	2,890	950	4,160	1,980	1,980	1,010	590	780	5,480	4,460	2,400
26	9,050	3,160	890	4,020	1,980	1,790	1,010	680	780	5,480	4,310	1,980
27	9,660	3,020	1,280	4,020	1,520	1,520	1,010	680	780	5,180	'4,310	1,790
28	9,200	3,020	2,180	3,440	1,610	1,440	890	680	780	5,480	4,460	1,790
29	9,050	......	3,730	3,160	1,610	1,440	890	680	950	5,330	4,890	1,790
30	8,000	......	5,330	3,160	1,700	1,140	890	680	890	4,740	5,040	1,790
31	7,250	......	5,780	......	1,610	......	890	680	......	4,310	......	1,790

Monthly Discharge of Oswegatchie River near Ogdensburg, N. Y.

[Drainage area, 1,580 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1903.					
April 22–30	4,020	1,790	2,670	1.69	.57
May	1,520	590	903	.572	.66
June	2,180	590	1,210	.766	.85
July	1,790	680	1,220	.772	.89
August	2,890	950	2,070	1.31	1.51
September	1,010	680	876	.554	.62
October	5,480	680	3,090	1.96	2.26
November	2,400	1,010	1,660	1.05	1.17
December	1,610	890	1,060	.671	.77
1904.					
January	3,880	780	1,400	.886	1.02
February	1,980	1,280	1,610	1.02	1.10
March	15,300	1,610	6,150	3.89	4.48
April	14,300	4,160	7,860	4.97	5.54
May	5,480	1,790	3,260	2.06	2.38
June	2,520	780	1,360	.861	.96
July	1,610	780	1,120	.709	.82
August	1,520	680	1,020	.646	.74
September	3,730	1,140	1,460	.924	1.03
October	5,180	1,980	3,040	1.92	2.21
November	2,890	780	1,480	.937	1.05
December	1,520	680	838	.530	.61
The year	15,300	680	2,550	1.61	21.94

Monthly Discharge of Oswegatchie River near Ogdensburg, N. Y.—(Continued).
[Drainage area, 1,580 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1905.					
January	5,630	890	1,830	1.16	1.34
February	890	680	796	.504	.52
March	15,800	680	3,750	2.37	2.73
April	15,800	2,760	7,470	4.73	5.28
May	4,160	2,180	2,960	1.87	2.16
June	5,480	1,790	4,000	2.53	2.82
July	5,480	1,440	2,770	1.75	2.02
August	3,730	1,440	2,310	1.46	1.68
September	2,400	1,140	1,710	1.08	1.20
October	3,160	1,010	1,690	1.07	1.23
November	3,160	1,610	2,210	1.40	1.56
December	6,660	1,440	3,120	1.97	2.27
The year	15,800	680	2,880	1.82	24.81
1906.					
January	9,660	3,020	6,070	3.84	4.43
February	6,360	1,140	2,520	1.59	1.66
March	5,780	890	2,030	1.28	1.48
April	5,780	3,160	4,120	2.61	2.91
May	3,300	1,520	2,280	1.44	1.66
June	5,180	1,010	2,600	1.65	1.84
July	2,290	890	1,460	.924	1.07
August	1,880	590	977	.618	.71
September	1,140	680	886	.561	.63
October	5,480	835	3,410	2.16	2.49
November	5,180	1,980	3,320	2.10	2.34
December	5,180	1,790	2,910	1.84	2.12
The year	9,660	590	2,720	1.72	23.34

RAQUETTE RIVER AT MASSENA SPRINGS, N. Y.

Raquette river drains a long, narrow basin extending from northern Hamilton county to St. Lawrence river. Its sources are on an elevated plateau, dotted with mountains interspersed with lakes. The region is timbered, but numerous marsh and swamp areas exist, many of which are on the divide and feed streams flowing in opposite directions. The lakes of the head-waters afford ample opportunities for storage development.

Observations at the dam of the Hannawa Falls Power Company were taken from September, 1902, to March 31, 1903. The discharge has not been computed.

A gaging station was established by Robert E. Horton at the highway bridge at Massena Springs, September 21, 1903. Observations were continued until October 17, 1903, when the station was temporarily abandoned. It was resumed April 9, 1904.

The channel is straight for 300 feet above and 1,000 feet below the bridge, which consists of a single span of 167.5 feet. The banks are not subject to overflow. The current is swift and uniform.

Discharge measurements are made from the down-stream side of the Massena Springs highway bridge. The initial point for soundings is the top of the right bridge abutment on the up-stream side of the bridge.

The gage, which was read during 1906 by G. L. Buffum, consists of a vertical scale attached to the right abutment on the up-stream side of the bridge. The bench-mark is a cross painted on the outside down-stream corner of the foundation adjacent to the sulphur springs; elevation above gage datum, 12.21 feet. The Sunday flow of this stream, like many others in this state, is often held back during the low-water season while ponds at mills above are being refilled. Where there is extensive pondage of this character the resultant effect may be shown in the stream for several days.

Mean daily gage height, in feet, of Raquette River at Massena Springs, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	5.2	6.65	5.5	4.0	5.85	5.45	3.55	3.6	2 2	2.45	3.2	4.0
2	4.75	6.45	5.15	5.1	5.75	5.5	4.0	3.45	1.5	2.4	3.5	3.9
3	4.8	6.25	5.1	5.2	5.55	5.35	3.9	3.15	2.1	2.35	3.35	4.75
4	5.7	5.8	5.0	4.55	5.5	5.3	2.5	2.9	2.0	2.2	2.2	5.75
5	5.8	6.2	4.65	4.15	5.5	5.35	4.15	1.8	1.95	2.1	3.15	7.0
6	5.8	5.8	4.55	4.0	5.5	5.5	4.0	2.85	1.85	2.1	3.15	7.55
7	4.4	5.75	4.45	4.0	5.5	5.4	4.1	2.9	1.8	1.6	3.0	7.9
8	5.65	5.95	4.6	3.75	5.5	5.55	3.65	2.8	1.8	2.05	2.4	8.5
9	5.8	6.0	4.75	4.05	5.6	6.3	3.95	2.8	1.65	2.15	3.05	8.05
10	5.7	6.1	4.9	3.95	5.45	5.95	4.0	2.9	2.8	2.2	3.25	7.85
11	5.7	5.75	4.9	3.8	5.35	6.45	4.0	2.9	2.8	2.45	3.05	8.05
12	5.55	6.5	4.75	3.7	5.55	5.9	4.0	2.05	2.7	2.5	3.4	7.35
13	5.45	6.05	4.7	3.75	5.1	5.8	4.0	2.85	2.65	2.5	3.35	7.6
14	4.75	6.0	4.7	3.7	6.9	5.75	3.9	2.75	2.6	2.0	3.05	7.5
15	5.55	5.9	4.7	3.05	6.45	5.7	3.25	2.35	2.6	2.5	2.75	7.5
16	5.3	5.95	4.55	5.3	6.3	5.7	4.0	2.1	1.8	2.5	2.7	7.4
17	4.95	5.95	4.45	5.1	6.25	5.65	4.0	2.25	2.6	2.6	3.05	7.7
18	5.0	5.6	4.35	5.75	6.05	5.95	4.0	2.3	2.7	2.6	2.6	7.3
19	5.05	5.8	4.2	5.6	5.85	5.6	4.0	1.2	2.7	2.6	4.05	6.7
20	5.3	5.7	4.2	5.35	5.05	5.35	4.0	1.95	2.7	2.6	3.95	6.9
21	5.7	5.75	4.1	5.5	5.85	5.05	3.85	1.85	2.6	2.2	3.6	6.9
22	9.65	5.85	4.3	5.45	5.7	4.75	3.5	1.8	2.6	2.9	3.8	6.9
23	10.6	6.0	4.6	6.1	5.65	4.55	3.65	1.75	1.7	2.9	3.8	6.9
24	9.05	6.0	4.7	5.95	5.55	4.1	3.55	1.7	2.65	2.9	3.85	6.5
25	7.5	5.85	3.45	6.05	5.45	4.0	3.4	1.7	2.7	3.85	3.45	5.7
26	7.3	5.8	4.7	6.0	5.4	4.0	3.5	1.45	2.7	4.05	4.05	5.2
27	7.05	5.75	5.2	5.85	4.8	4.0	3.5	1.9	2.65	3.85	4.15	6.3
28	6.65	5.7	6.3	5.65	4.95	4.0	3.5	1.95	2.6	3.4	4.1	6.1
29	6.3	......	6.45	4.85	5.15	4.0	2.8	2.1	2.6	3.85	3.95	5.2
30	6.35	......	6.15	5.9	5.35	3.9	3.7	2.2	1.5	3.6	4.1	6.3
31	6.9	......	5.8	......	5.35	......	3.8	2.2	......	3.15	......	5.6

Gage heights, based on new datum, established 1906, which is 1.0 foot lower than the previous datum.

River began to freeze over about the middle of January, ¼ mile below gage being entirely closed; ice about 0.65 foot thick. Freezing began at the gage about the first of February. February 28, ice all gone at gage, river still frozen over about ¼ mile below. Ice went out of river about March 31. Needle ice forms at times and causes backwater.

December 2, river began filling with needle ice below gage, causing a rise of nearly 4 feet During the frozen period in December gage readings were taken to top of ice, together with the following comparative readings:

DATE.	GAGE HEIGHT TO		Thickness of ice at gage.
	Water-surface.	Top of ice.	
	Feet.	*Feet.*	*Feet.*
December 15	7.5	7.4	*a*.65
December 19	6.3	6.7	*a*.83
December 22	6.8	6.9	.83
December 26	5.0	5.2	1.16
December 29	4.9	5.2	*b*1.70

a Anchor ice.
b Anchor ice gone.

Current Meter Discharge Measurements of Racquette River at Messena Springs, N. Y.

DATE.	Hydrographer.	Width.	Area of section.	Gage height.*a*	Discharge.
1906.		*Feet.*	*Square feet.*	*Feet.*	*Second-feet.*
April 19	C. C. Covert	176	954	5.38	3,390
April 20	C. C. Covert	176	975	5.45	3,500
Aug. 14	Covert and Weeks	175	581	3.38	1,440
Aug. 15	E. F. Weeks	175	426	2.53	1,010
Oct. 27	Barrows and Covert	172	629	3.65	1,780

a Gage heights based on new datum established 1906, which is 1.00 foot lower than the previous datum.

Rating Table for Raquette River at Massena Springs, N. Y., from January 1, to December 31, 1906.a

Gage height.	Discharge.	Gage. height.	Discharge.	Gage. height.	Discharge.	Gage. height.	Discharge.
Feet.	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*
1.00	190	2.60	1,005	4.20	2,310	6.60	4,620
1.10	226	2.70	1,070	4.30	2,400	6.80	4,820
1.20	265	2.80	1,140	4.40	2,490	7.00	5,020
1.30	310	2.90	1,210	4.50	2,580	7.20	5,220
1.40	355	3.00	1,285	4.60	2,675	7.40	5,420
1.50	400	3.10	1,360	4.70	2,770	7.60	5,620
1.60	445	3.20	1,435	4.80	2,865	7.80	5,820
1.70	495	3.30	1,515	4.90	2,960	8.00	6,020
1.80	545	3.40	1,595	5.00	3,055	8.20	6,220
1.90	595	3.50	1,680	5.20	3,245	8.40	6,420
2.00	650	3.60	1,770	5.40	3,435	8.60	6,620
2.10	705	3.70	1,860	5.60	3,625	8.80	6,820
2.20	760	3.80	1,950	5.80	3,820	9.00	7,020
2.30	820	3.90	2,040	6.00	4,020	10.00	8,020
2.40	880	4.00	2,130	6.20	4,220	11.00	9,020
2.50	940	4.10	2,220	6.40	4,420		

The above table is applicable only for open-channel conditions. It is based on discharge measurements made during 1904–6. It is well defined between gage heights 0.1 foot and 1.9 feet; also between 5 feet and 6 feet.

a The above rating is the same as that used for 1904 and 1905, except that the gage heights have been increased 1.00 foot to allow for setting the datum of the gage 1.00 foot lower.

Mean Daily Discharge, Second-feet, of Racquette River at Massena Springs, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	3,240	......	3,530	2,130	3,870	3,480	1,720	1,770	760	910	1,440	......
2	2,820	......	3,200	3,150	3,770	3,530	2,130	1,640	400	880	1,680	......
3	2,860	......	3,150	3,240	3,580	3,390	2,040	1,400	705	850	1,560	......
4	3,720	......	3,060	2,630	3,530	3,340	940	1,210	650	760	760	......
5	3,820	......	2,720	2,260	3,530	3,390	2,260	545	622	705	1,400	......
6	3,820	......	2,630	2,130	3,530	3,530	2,130	1,180	570	705	1,400	......
7	2,490	......	2,540	2,130	3,530	3,440	2,220	1,210	545	445	1,280	......
8	3,670	......	2,680	1,900	3,530	3,580	1,820	1,140	545	678	880	......
9	3,820	......	2,820	2,180	3,620	4,320	2,080	1,140	470	732	1,320	......
10	3,720	......	2,960	2,080	3,480	3,970	2,130	1,210	1,140	760	1,480	......
11	3,720	......	2,960	1,950	3,390	4,470	2,130	1,210	1,140	910	1,320	......
12	3,580	......	2,820	1,860	3,580	3,920	2,130	678	1,070	940	1,600	......
13	3,480	......	2,770	1,900	3,150	3,820	2,130	1,180	1,040	940	1,560	......
14	2,820	......	2,770	1,860	4,920	3,770	2,040	1,100	1,000	650	1,320	......
15	3,580	......	2,770	1,320	4,470	3,720	1,480	850	1,000	940	1,100	......
16	3,340	......	2,630	3,340	4,320	3,720	2,130	705	545	940	1,070	......
17	3,010	......	2,540	3,150	4,270	3,670	2,130	790	1,000	1,000	1,320	......
18	3,060	......	2,440	3,770	4,070	3,970	2,130	820	1,070	1,000	1,000	......
19	3,100	......	2,310	3,620	3,870	3,620	2,130	265	1,070	1,000	2,180	......
20	3,340	......	2,310	3,390	3,100	3,390	2,130	622	1,070	1,000	2,080	......
21	3,720	......	2,220	3,530	3,870	3,100	2,000	570	1,000	760	1,770	......
22	7,670	......	2,400	3,480	3,720	2,820	1,680	545	1,000	1,210	1,950	......
23	8,620	......	2,680	4,120	3,670	2,630	1,820	520	495	1,210	1,950	......
24	7,070	......	2,770	3,970	3,580	2,220	1,720	495	1,040	1,210	2,000	......
25	5,520	......	1,640	4,070	3,480	2,130	1,600	495	1,070	2,000	1,640	......
26	5,320	......	2,770	4,020	3,440	2,130	1,680	378	1,070	2,180	2,180	......
27	5,070	......	3,240	3,870	2,860	2,130	1,680	595	1,040	2,000	2,260	......
28	4,670	......	4,320	3,670	3,010	2,130	1,680	622	1,000	1,600	2,220	......
29	4,320	......	4,470	2,910	3,200	2,130	1,140	705	1,000	2,000	2,080	......
30	4,370	......	4,170	3,920	3,390	2,040	1,860	760	400	1,770	2,220	......
31	4,920	......	3,820	......	3,390	......	1,950	760	......	1,400	......	......

Monthly discharge of Racquette River at Massena Springs, N. Y.
[Drainage area, 1,170 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1906.					
January	8,620	2,490	4,140	3.54	4.08
March	4,470	1,640	2,910	2.49	2.87
April	4,120	1,320	2,920	2.50	2.79
May	4,920	2,860	3,640	3.11	3.58
June	4,470	2,040	3,250	2.78	3.10
July	2,260	940	1,900	1.62	1.87
August	1,770	265	875	.748	.86
September	1,140	400	851	.727	.81
October	2,180	445	1,100	.940	1.08
November	2,260	760	1,600	1.37	1.53

LAKE ONTARIO DRAINAGE.

GENERAL FEATURES.

In the northwestern part of the state of New York, between Niagara and St. Lawrence rivers, is an area aggregating about 12,400 square miles drained by streams which flow into Lake Ontario. The divide which controls this drainage is very irregular. Extending to the south and southeast from Fort Niagara, it passes around the head waters of the Genesee a short distance into Pennsylvania; thence re-entering New York it runs southward and eastward from the interior group of lakes, turns to the north, encircles the sources of Black river, turns again to the west, and descends to the lake. The country thus included is level or gently undulating in the counties bordering the lake, but farther south it becomes more rolling, and a series of ridges, gradually increasing in height, stretch down between Cayuga and Seneca, and their companion lakes, finally becoming merged with the elevated, broken country forming the principal divide, the abrupt slopes of which attain altitudes of from 2,000 to 2,500 feet about the head waters of the Genesee.

The easterly, or Black river lobe of the drainage basin receives the run-off from the southwestern slope of the Adirondack mountains — largely a rugged and forest-covered area — receiving heavy precipitation, especially in the winter.

Drift deposits are generally scattered over the section, and the soil is in part derived from that source and in part from the disintegration of native rocks.

The principal streams of the area are the Oswego, formed by the union of Seneca and Oneida rivers, which drain the chain of lakes in central New York, the Genesee, Salmon and Black rivers.

BLACK RIVER BASIN.

DESCRIPTION OF BASIN.

Black river rises in the western part of Hamilton county, N. Y., flows southwestward across Herkimer county into Oneida county, turns near Forestport and runs somewhat west of north through Lewis county to eastern Jefferson county, and then flows westward to Black River bay, at the eastern extremity of Lake Ontario. The upper part of the basin is very rugged and mountainous and contains a large number of lakes.

The regimen of the river is controlled by storage on its upper tributaries, including Beaver river at Beaver, a series of reservoirs at the head waters of Moose river, and additional reservoirs at Forestport and on the head waters of the main river.

Water is diverted from Black river through Forestport feeder to supply the Black River canal at Boonville. A portion of this diverted water flows northward from Boonville and enters Black river again at Lyons Falls; the remainder flows southward through the Black River canal and enters the Erie canal at Rome.

Measurements made by the New York Barge canal department showed the following amounts of flow in the Black River canal south of the Forestport feeder:

Current Meter Discharge Measurements of Black River Canal at the Highway Bridge below Lock No. 7, near Boonville, N. Y.

DATE.	Elevation of water-surface.	Discharge.
1900.	*Feet.*	*Second-feet.*
August 21	....	197
September 24	....	242
November 7	....	254
December 1	....	181
1905.		
August 17	488.22	136
August 18	488.32	117
September 7	488.40	158
September 22	488.29	143
November 8	488.30	131

BLACK RIVER NEAR FELTS MILLS, JEFFERSON COUNTY, N. Y.

This station was established by Robert E. Horton, August 29, 1902. It is located at the dam of the Black River Traction Company, near the village of Felts Mills. The dam is nine miles up-stream from Watertown and seven miles up-stream from the old Huntingtonville gaging station on this stream. The drainage area is estimated at 1,851 square miles, or 37.5 square miles less than at Huntingtonville. The intervening area is mainly drained by two small streams, Townsend and Rutland Hollow creeks.

The dam is of sawed timber, rests on limestone foundation, and is very nearly water-tight. It has a slope on the up-stream face of 2.88 horizontal to 1 vertical. The crest is protected by boiler plate and the down-stream face is vertical, giving a free overfall. The main crest is 380.6 feet long. There are two additional sections on the right-hand side, one 14.1 feet long and the other 17.9 feet. A similarly constructed dam, 117 feet long, at the left bank serves as an auxiliary spillway and as a head-race wall.

The gage, which was read twice daily during 1906, at 7 a. m. and 6 p. m. is attached vertically to a crib at the junction of the main and auxiliary spillways, 12 feet up-stream from the crest, and correction is made to the gage readings for velocity of approach during high water. The discharge over the spillways has been calculated by means of the weir formula, using coefficients derived from experiments of the United States Geological Survey for a dam of similar cross-section.

A paper-mill has been constructed adjacent to this dam and was in operation during the greater part of 1906. The low water of the year, in conjunction with the draught through the turbines, lowered the water in the pond sufficiently, so that a profile of the crest could be obtained, this not having been possible hitherto since the dam was erected. It was found that the dam remained without great leakage, but that, as anticipated, it had settled considerably, this settlement, together with certain temporary openings, being sufficient to account for the apparently abnormal low water noted in former reports on certain occasions. Assuming the crest of the dam to have settled in such a manner as to produce a uniform increase in discharge each year, a recomputation of the discharge has been made, as shown in the accompanying tables.

Mean Daily Discharge, Second-feet, of Black River near Felts Mills, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1902.												
1	......	......	......	......	......	......	......	......	1,090	1,650	4,090	2,750
2	......	......	......	......	......	......	......	......	1,180	1,600	3,290	2,350
3	......	......	......	......	......	......	......	......	1,440	1,710	3,020	2,220
4	......	......	......	......	......	......	......	......	1,390	1,390	2,350	5,190
5	......	......	......	......	......	......	......	......	1,230	909	1,880	4,630
6	......	......	......	......	......	......	......	......	1,090	1,490	1,820	3,020
7	......	......	......	......	......	......	......	......	688	2,110	1,820	3,160
8	......	......	......	......	......	......	......	......	1,440	2,110	1,880	2,810
9	......	......	......	......	......	......	......	......	1,600	2,290	1,820	2,620
10	......	......	......	......	......	......	......	......	1,600	1,990	1,710	2,420
11	......	......	......	......	......	......	......	......	2,480	1,340	1,650	1,990
12	......	......	......	......	......	......	......	......	2,110	1,440	1,710	1,490
13	......	......	......	......	......	......	......	......	1,710	1,600	4,790	1,550
14	......	......	......	......	......	......	......	......	1,230	2,220	5,280	1,600
15	......	......	......	......	......	......	......	......	1,550	2,550	5,450	1,440
16	......	......	......	......	......	......	......	......	1,440	2,220	4,160	1,710
17	......	......	......	......	......	......	......	......	1,390	1,820	3,290	688
18	......	......	......	......	......	......	......	......	1,340	1,760	2,880	2,480
19	......	......	......	......	......	......	......	......	1,290	1,550	2,810	3,570
20	......	......	......	......	......	......	......	......	1,040	1,940	3,020	3,360
21	......	......	......	......	......	......	......	......	776	2,110	2,480	3,790
22	......	......	......	......	......	......	......	......	1,290	2,350	2,050	4,390
23	......	......	......	......	......	......	......	......	1,130	1,880	1,880	6,050
24	......	......	......	......	......	......	......	......	865	2,220	2,950	6,730
25	......	......	......	......	......	......	......	......	953	1,760	2,420	5,870
26	......	......	......	......	......	......	......	......	1,130	1,820	2,050	5,450
27	......	......	......	......	......	......	......	......	909	2,110	2,220	4,470
28	......	......	......	......	......	......	......	......	1,130	2,480	2,880	3,790
29	......	......	......	......	......	......	......	1,340	1,440	4,160	3,290	3,360
30	......	......	......	......	......	......	......	1,230	1,710	4,950	2,420	3,160
31	......	......	......	......	......	......	......	1,040	......	5,030	......	2,950
Mean	......	......	......	......	......	......	......	1,200	1,320	2,150	2,780	3,260

Mean Daily Discharge, Second-feet, of Black River near Felts Mills, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1903.												
1	2,820	5,990	8,940	6,260	2,430	662	2,180	5,900	2,430	1,190	2,560	1,500
2	2,370	6,940	9,510	6,070	2,180	588	2,130	4,250	1,950	1,500	2,300	1,610
3	2,560	7,040	9,990	5,560	1,830	588	2,180	3,950	1,950	1,290	2,180	1,710
4	3,510	7,750	10,220	6,650	1,890	588	2,300	3,650	1,610	1,500	1,950	1,830
5	4,250	8,720	9,280	7,650	2,070	476	2,070	3,800	1,400	1,400	2,430	1,950
6	3,880	7,960	8,830	*a*	1,830	401	2,560	4,100	1,290	1,500	3,090	2,070
7	3,650	7,040	7,650	*a*	1,770	401	3,510	4,400	1,100	1,500	2,690	2,180
8	3,020	6,360	7,860	*a*	1,830	918	3,370	4,730	918	1,950	2,180	2,430
9	2,690	5,650	10,590	*a*	1,710	873	2,950	2,950	828	3,510	1,950	2,070
10	2,500	4,560	11,700	*a*	1,500	1,050	2,560	3,650	828	11,830	1,710	1,500
11	2,130	4,180	14,590	*a*	1,190	625	1,950	3,370	1,010	17,830	1,500	1,950
12	2,070	4,730	17,830	*a*	1,710	1,950	1,710	3,650	828	18,350	1,710	1,950
13	1,950	5,900	17,050	*a*	1,500	5,650	1,830	4,100	1,190	10,830	1,500	1,710
14	1,830	5,990	16,010	*a*	1,140	5,220	1,500	3,800	737	8,940	1,710	1,950
15	1,710	5,900	14,590	*a*	828	4,100	1,290	2,690	737	7,860	1,950	2,560
16	1,950	5,560	12,100	*a*	737	2,890	1,190	2,070	737	6,850	2,180	2,070
17	2,180	4,970	11,830	*a*	1,100	2,560	1,010	1,830	1,010	6,260	2,430	1,610
18	1,660	4,330	11,570	*a*	873	1,950	918	1,290	1,100	7,860	2,180	1,950
19	1,500	4,180	13,170	*a*	1,050	1,500	737	1,290	1,610	9,400	1,950	1,950
20	1,890	3,880	15,170	*a*	1,190	1,660	588	1,290	1,290	10,590	1,610	1,830
21	3,020	3,160	17,180	*a*	737	1,190	1,190	1,770	1,950	10,590	1,500	2,300
22	3,020	2,950	*b*	*a*	551	2,950	1,610	1,890	1,290	9,160	1,950	3,090
23	2,300	2,890	*b*	*a*	737	3,730	2,430	1,950	1,100	6,850	2,300	3,650
24	2,430	2,690	*b*	*a*	259	3,650	3,230	1,710	1,290	5,060	2,820	4,250
25	2,890	2,690	*b*	*a*	662	3,730	3,650	2,070	1,010	4,730	2,300	4,560
26	3,020	2,630	*b*	1,770	828	4,250	3,230	2,430	737	4,560	2,180	3,650
27	3,020	2,760	*b*	2,240	737	4,030	2,820	2,820	828	3,950	1,950	3,230
28	3,020	3,730	17,570	2,760	588	3,230	2,430	2,690	828	3,650	1,610	3,510
29	3,950	......	13,740	2,370	588	2,560	2,690	2,560	1,500	3,230	1,400	3,510
30	4,890	......	8,720	1,770	513	2,180	5,390	2,430	1,400	2,950	1,710	3,090
31	6,360	......	7,040	......	513	......	6,850	2,560	......	2,690	......	2,820

a Record not available; gage heights uncertain. *b* Above rating table.

Mean Daily Discharge, Second-feet, of Black River near Felts Mills, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	2,760	1,150	1,890	10,460	*c*	3,590	1,830	1,830	876	8,180	2,760	1,450
2	2,500	1,450	2,130	9,990	*c*	3,160	1,610	1,720	632	8,180	2,700	1,560
3	2,250	1,890	2,760	9,520	*c*	2,440	2,250	1,350	1,060	7,670	2,440	1,660
4	2,500	2,130	3,730	10,220	*c*	2,370	2,370	1,290	1,450	6,770	2,700	747
5	2,130	2,760	4,660	10,710	*c*	2,190	2,190	1,510	2,570	5,490	2,630	1,060
6	2,010	4,990	5,150	10,220	*c*	2,250	2,250	1,150	2,370	4,340	2,570	1,240
7	1,660	7,360	5,490	9,520	*c*	2,890	2,440	670	1,560	3,730	2,370	1,450
8	1,560	6,770	4,660	8,840	*c*	3,090	2,130	1,350	1,190	3,230	2,310	1,150
9	1,350	6,190	4,030	9,060	*c*	4,110	1,830	1,560	1,350	2,760	1,950	1,190
10	1,560	5,840	3,590	15,310	*c*	5,070	1,060	1,350	1,060	2,890	1,770	1,190
11	1,890	5,490	4,300	18,400	*c*	5,670	1,290	1,400	1,060	4,190	1,770	1,450
12	2,250	*a*5,150	3,590	*b*19,680	*c*	5,410	1,350	1,060	876	5,670	1,770	1,720
13	1,770	4,820	3,880	15,890	*c*	4,490	1,450	747	831	6,190	1,560	1,560
14	1,060	4,490	3,300	13,580	*c*	3,300	1,720	632	1,950	5,670	1,830	1,660
15	876	4,190	2,760	11,440	4,110	2,570	1,660	967	831	5,150	1,770	1,770
16	785	3,590	3,020	9,520	5,490	1,890	1,450	1,510	1,350	3,450	1,890	1,660
17	785	3,300	2,890	7,980	5,760	1,950	1,350	1,290	1,610	3,020	1,770	1,890
18	785	3,160	2,500	7,570	5,410	1,660	1,660	1,060	967	2,370	1,510	1,890
19	967	2,500	1,890	6,770	4,570	1,290	4,030	831	831	2,010	1,830	1,720
20	967	1,560	2,370	6,190	4,660	1,450	3,090	1,100	1,150	2,010	1,190	1,770
21	1,060	1,450	3,300	5,670	5,490	1,290	1,770	2,630	2,190	2,250	1,660	1,660
22	1,560	1,770	4,300	5,490	5,580	1,190	1,060	5,670	2,890	5,490	2,010	1,720
23	2,760	2,130	6,190	5,840	5,150	2,250	1,010	5,930	2,630	5,840	1,890	1,610
24	3,020	2,630	7,570	6,190	7,570	2,830	1,010	6,290	1,890	6,020	1,770	1,660
25	2,250	2,760	8,400	8,400	7,260	2,370	1,610	4,190	3,380	6,380	1,890	1,660
26	2,010	2,130	12,490	9,990	7,570	1,890	1,890	3,090	6,020	6,020	1,770	1,830
27	1,770	1,770	13,870	11,960	7,570	1,510	1,560	2,370	6,770	5,490	*d*967	1,770
28	1,450	1,560	13,870	13,580	4,570	922	1,350	2,370	6,770	4,820	1,290	1,950
29	1,350	1,450	13,300	15,010	4,410	709	2,010	1,660	6,290	4,340	1,770	2,190
30	1,350	......	11,960	16,140	4,190	1,560	2,130	1,400	7,360	3,160	1,450	3,180
31	1,150	......	10,710	....	3,960	......	1,350	1,240	......	2,890	......	1,660

a Pond frozen over, more or less ice obstruction from this date to March 26, when ice went out of pond. *b* Above rating table; estimated. *c* No record. *d* Ice obstruction; record approximate for remainder of year.

Mean Daily Discharge, Second-feet, of Black River near Felts Mills, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	4,210	2,440	1,840	18,210	7,480	3,530	8,200	4,510	1,790	1,620	2,080	4,670
2	4,510	2,570	1,840	17,490	8,300	3,170	6,880	*c*	1,510	1,840	1,900	5,090
3	3,900	2,970	1,840	16,400	7,890	2,570	6,300	*c*	1,510	1,730	2,200	4,360
4	3,030	2,840	1,290	13,150	7,080	2,200	6,300	*c*	4,670	2,320	2,200	3,680
5	2,640	2,840	1,290	14,860	6,690	2,200	6,690	*c*	4,840	2,200	......	4,360
6	2,570	3,100	1,730	16,760	6,490	3,100	6,120	*c*	7,680	1,960	3,680	4,920
7	2,570	2,510	1,620	18,450	6,490	3,750	4,920	4,050	10,330	1,840	5,600	5,090
8	2,570	2,700	1,400	15,450	6,300	3,900	1,680	3,900	5,010	1,620	5,600	5,250
9	2,570	2,840	1,400	14,860	6,210	4,360	3,530	3,460	4,440	1,840	5,600	5,170
10	2,570	2,570	1,200	11,320	6,120	4,360	3,100	2,900	3,900	1,620	5,420	4,920
11	2,510	2,440	1,110	10,330	5,420	3,680	2,700	2,380	3,750	1,620	4,920	3,820
12	2,320	2,260	1,060	10,950	5,090	3,680	2,380	2,380	2,900	1,620	4,050	3,820
13	2,200	2,320	1,290	10,570	4,670	5,680	2,510	2,020	2,900	2,570	3,970	3,530
14	2,700	2,320	1,240	11,070	1,400	5,420	2,570	2,640	2,700	2,970	4,050	3,820
15	2,840	2,700	1,290	10,570	1,150	4,590	2,970	3,320	1,960	3,530	3,970	3,680
16	2,840	2,380	1,400	10,450	1,200	3,820	2,840	6,490	2,080	4,510	3,530	2,840
17	2,970	2,260	1,240	9,390	1,290	6,880	3,100	5,860	1,680	3,680	3,390	2,900
18	2,770	2,320	1,150	8,410	1,240	8,520	3,320	5,010	1,960	2,970	3,390	4,210
19	2,510	2,570	1,840	6,490	1,110	9,860	3,970	3,900	3,170	2,700	2,970	2,200
20	2,320	2,700	3,240	5,950	1,200	10,820	5,090	2,840	3,680	3,970	2,770	2,200
21	1,960	2,320	4,360	6,690	1,200	11,070	5,510	2,570	3,100	5,600	2,700	2,440
22	2,080	2,080	4,360	8,090	1,110	9,740	5,090	2,020	4,510	4,590	4,360	2,840
23	2,140	1,840	4,760	9,170	1,020	8,520	3,530	2,020	2,200	4,360	4,210	3,680
24	2,260	1,960	5,250	10,820	677	7,680	2,570	1,680	3,600	3,820	3,600	3,530
25	2,320	1,840	7,270	10,570	559	6,120	2,260	1,240	2,900	3,390	3,240	2,700
26	2,080	1,680	8,850	9,860	520	7,270	2,140	880	2,440	2,080	3,030	5,420
27	2,020	1,620	10,100	9,170	795	8,740	2,020	638	2,080	2,440	2,900	4,590
28	2,640	1,680	10,820	9,060	1,020	9,060	1,960	716	2,080	2,700	3,030	3,970
29	2,200	......	11,320	8,520	3,170	9,170	1,960	559	1,900	3,100	3,750	3,820
30	*a*	......	15,450	7,480	3,680	9,060	2,320	638	1,680	2,700	5,420	5,950
31	2,440	......	17,490	......	3,680	......	3,100	880	......	2,200	......	6,120

a Record doubtful. *c* No record.

Mean Daily Discharge, Second-feet, of Black River near Felts Mills, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	7,630	5,390	2,970	7,320	4,790	3,220	3,520	1,530	880	2,360	2,240	3,070
2	7,810	4,490	2,740	6,720	4,360	1,920	6,170	1,710	1,420	2,340	2,020	2,040
3	4,640	3,190	2,440	5,230	4,790	1,920	5,280	1,430	1,350	2,010	1,540	2,700
4	4,790	3,080	4,440	4,790	5,550	1,810	5,280	1,450	1,440	1,290	1,470	2,000
5	5,080	2,740	5,390	5,080	6,030	1,920	5,990	300	1,530	1,320	2,400	1,820
6	6,030	2,540	5,080	5,230	6,540	2,040	2,760	1,620	1,560	1,370	1,530	1,610
7	4,600	2,540	4,220	5,080	6,720	2,170	2,810	1,590	1,060	1,720	1,450	2,200
8	5,550	2,350	3,560	4,440	5,550	1,920	2,290	1,790	1,260	2,380	1,440	2,020
9	5,080	2,350	3,190	5,080	4,940	2,290	2,540	1,680	890	2,190	1,500	1,750
10	3,690	2,350	2,540	4,490	4,360	2,290	2,420	1,500	980	2,190	1,350	2,260
11	3,440	2,950	2,540	4,350	4,360	2,950	2,810	1,470	980	2,600	1,470	1,780
12	3,310	2,740	3,690	4,790	4,360	3,520	3,080	1,080	700	2,500	2,410	1,860
13	3,190	2,160	2,540	5,390	3,960	3,220	2,540	1,410	1,410	2,690	2,320	1,780
14	2,680	2,160	2,540	5,870	8,010	3,220	2,040	1,440	1,380	2,120	2,230	*a*2,390
15	2,630	2,740	2,540	6,930	8,400	2,170	1,170	1,830	1,240	1,790	2,150	1,890
16	2,630	2,350	2,350	9,830	9,210	1,920	1,360	1,220	890	1,560	2,030	2,810
17	2,540	2,160	1,990	13,400	8,790	2,290	1,470	1,110	1,220	1,470	*b*2,110	2,340
18	4,490	1,920	1,360	14,200	8,010	3,370	1,470	840	1,280	1,440	*b*2,120	2,890
19	3,690	2,970	2,440	12,900	6,030	2,950	1,470	80	960	1,440	5,230	2,910
20	3,690	1,990	1,910	11,900	4,870	2,040	1,080	1,700	1,480	2,380	5,210	2,740
21	3,220	1,990	1,630	11,600	3,220	1,920	1,080	1,300	1,180	3,570	4,730	2,480
22	7,710	4,790	2,250	11,300	3,220	1,990	1,080	1,440	970	3,640	4,590	2,270
23	13,400	4,490	1,750	11,600	3,220	1,700	1,850	1,680	590	3,120	4,140	1,700
24	18,100	4,490	2,070	10,500	2,680	1,700	1,380	1,910	1,700	2,560	3,580	1,280
25	18,800	4,440	1,360	10,000	2,540	1,920	1,840	1,540	1,660	2,180	3,160	1,080
26	19,000	5,710	2,250	8,590	2,420	1,810	1,230	1,310	1,550	*b*2,280	3,130	1,970
27	19,000	4,490	2,630	7,260	3,220	1,470	1,070	1,840	1,180	*b*2,370	2,990	1,710
28	11,600	4,490	6,370	6,370	4,120	1,410	870	1,300	1,040	2,420	5,030	1,650
29	9,000	......	7,630	5,450	5,100	1,430	800	1,280	860	3,740	4,500	1,620
30	6,200	......	7,260	5,710	5,100	723	1,650	1,350	1,150	2,940	3,750	1,470
31	6,030	......	7,440	......	3,960	......	1,330	1,390	......	2,670	......	2,390

a December 14–30, inclusive, crest of dam badly obstructed by ice. *b* Logs on crest of dam; record approximate.

NOTE.—December 1, 2, 3, considerable anchor ice in wheel-rack; river partly frozen over. December 7, pond frozen over; ice within 75 feet of crest.

Monthly Discharge of Black River near Felts Mills, N. Y.
[Drainage area, 1,851 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1902.					
August 29, 30, 31	1,340	1,040	1,200	0.649	0.750
September	2,480	688	1,320	0.713	0.793
October	5,030	909	2,150	1.16	1.34
November	5,450	1,650	2,780	1.50	1.67
December	6,730	688	3,260	1.76	2.03
1903.					
January	6,360	1,500	2,840	1.53	1.76
February	8,720	2,630	5,050	2.73	2.84
March 1-21, 28-31	17,830	7,040	12,110	6.54	7.54
April 1-5, 26-30	7,650	1,770	4,310	2.33	2.60
May	2,430	259	1,200	0.648	0.749
June	5,650	401	2,210	1.19	1.33
July	6,850	588	2,390	1.29	1.49
August	5,900	1,290	2,960	1.60	1.84
September	2,430	737	1,220	0.659	0.730
October	18,350	1,190	6,110	3.30	3.80
November	3,090	1,500	2,050	1.11	1.24
December	4,560	1,500	2,460	1.33	1.53
The year	7,490	1,700	3,740	2.02	27.41
1904.					
January	3,020	785	1,690	.912	1.05
February	7,360	1,150	3,320	1.79	1.93
March	13,870	1,890	5,630	3.04	3.50
April	18,400	5,490	10,640	5.75	6.36
May	7,570	3,960	5,490	2.96	3.41
June	5,670	709	2,580	1.39	1.55
July	4,030	1,010	1,800	0.972	1.12
August	6,290	632	1,980	1.07	1.23
September	7,360	632	2,320	1.25	1.39
October	8,180	2,010	4,700	2.54	2.93
November	2,760	967	1,920	1.04	1.16
December	3,810	747	1,650	0.891	1.02
The year	7,360	1,670	3,640	1.97	26.65
1905.					
January	4,510	1,960	2,640	1.43	1.65
February	3,100	1,620	2,380	1.29	1.34
March	17,490	1,110	4,010	2.17	2.50
April	18,210	5,950	11,350	6.13	6.83
May	8,300	520	3,560	1.92	2.21
June	11,070	2,200	6,080	3.28	3.66
July	8,200	1,680	3,800	2.05	2.36
August	6,590	559	2,680	1.45	1.67
September	10,330	1,510	3,300	1.78	1.99
October	5,600	1,620	2,770	1.50	1.73
November	5,600	1,900	3,710	2.00	2.23
December	6,120	2,200	4,050	2.19	2.52
The year	8,760	1,900	4,190	2.26	30.69
1906.					
January	19,000	2,540	7,080	3.82	4.40
February	5,710	1,920	3,220	1.74	1.81
March	7,630	1,360	3,330	1.80	2.08
April	14,200	4,350	7,710	4.16	4.67
May	9,210	2,420	5,120	2.76	3.18
June	3,520	723	2,170	1.17	1.31
July	6,170	800	2,310	1.25	1.44
August	1,910	80	1,390	0.751	0.861
September	1,700	590	1,200	0.648	0.719
October	3,740	1,290	2,280	1.23	1.42
November	5,230	1,350	2,790	1.51	1.68
December	3,340	1,080	2,110	1.14	1.31
The year	6,780	1,540	3,390	1.83	24.88

MOOSE RIVER AT MOOSE RIVER, N. Y.

Moose river is tributary to Black river at Lyons Falls, N. Y. Its drainage basin lies chiefly in Herkimer and Hamilton counties and comprises a wild, rugged, and uninhabited region, largely forest-covered, but containing also extensive tracts of cut and burned-over lands. The flow of the stream is more or less regulated by lumbermen's dams, the storage of which is utilized for floating logs.

The gaging station was established June 5, 1900. It is located at Moose River village.

The stream is smooth above the gaging station to the foot of McKeever dam, two miles up-stream, but a short distance above the gage it is divided by an island which creates an ice jam during freshets. A short distance below the station a fall occurs. The bed of the stream is of cobble with occasional boulders, the current is smooth, and the depth is fairly uniform. The stream freezes over in winter, alternate layers of ice and snow or slush often forming in such a manner as to prevent discharge measurements being made.

A cableway, having a clear span of 269 feet, was erected in June, 1903, from which current-meter measurements have since been made. The initial point for soundings is the left support of the cable.

The gage, which is read twice daily by Chris Hannan, consists of a graduated board scale, attached to posts on the left bank of the stream, and comprises a high-water and a low-water section. During the ice season the gage is read once each week. The gage was carried out by an ice freshet in February, 1903, and was replaced at a slightly different elevation. The bench-mark is on the top of a boulder on the left bank, 300 feet up-stream from the cableway. Its elevation above the gage zero, prior to February 28, 1903, was 15.36 feet; after February 28, 1903, 15.53 feet.

Mean Daily Gage Height, in Feet, of Moose River at Moose River, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	2.92	2.78	2.53	2.58	3.38	2.03	2.83	1.73	.9	1.96	1.1	2.25
2	2.67	2.68	2.43	2.58	3.33	1.88	3.43	1.68	.8	1.2	1.5	2.0
3	2.72	2.53	2.33	2.48	4.28	1.73	2.93	1.73	.95	1.2	1.6	1.7
4	2.72	2.38	2.58	2.38	4.38	1.63	3.18	1.73	1.6	1.0	1.4	1.6
5	2.72	2.23	2.68	2.63	4.43	1.53	2.93	1.63	1.2	.9	1.4	1.4
6	2.62	2.03	2.48	2.73	4.93	1.43	2.43	1.63	.75	1.05	1.4	1.55
7	2.52	1.93	2.28	2.53	4.53	1.53	3.13	1.53	.6	1.25	1.5	1.6
8	2.52	2.03	2.13	2.33	4.23	2.38	1.78	1.28	.5	1.4	1.4	1.7
9	2.62	2.03	2.03	2.23	3.33	3.63	1.88	1.03	.5	1.3	1.5	1.55
10	2.72	2.03	2.03	2.23	3.33	3.18	1.83	1.03	.55	1.25	1.5	1.35
11	2.62	2.13	1.93	2.43	3.13	2.73	1.73	.93	.85	1.7	1.6	1.15
12	2.57	2.13	1.83	2.38	3.03	2.53	1.63	1.03	1.0	1.65	1.6	1.2
13	2.42	2.03	1.73	2.23	4.28	2.38	1.73	1.13	1.0	1.65	1.7	1.35
14	2.27	1.93	1.68	2.43	6.13	1.98	1.73	1.03	1.3	1.65	1.65	1.6
15	2.22	1.93	1.63	5.73	5.13	1.83	1.63	.93	1.0	1.45	1.7	1.7
16	2.12	2.03	1.63	5.98	4.28	1.73	1.53	.83	1.0	1.4	1.85	1.75
17	2.12	2.03	1.63	5.23	4.13	1.98	1.43	.73	.9	1.4	2.2	1.8
18	2.25	2.13	1.53	5.03	3.98	1.83	1.38	.73	......	1.5	2.85	1.75
19	2.45	2.13	1.53	5.33	3.78	1.93	1.28	.63	.65	1.65	3.05	1.6
20	2.6	2.28	1.43	5.43	3.33	1.93	1.18	.63	.85	2.20	2.95	1.5
21	3.47	2.53	1.23	5.58	2.93	1.83	1.13	1.03	.75	2.05	2.75	1.5
22	3.97	2.78	1.43	5.83	2.63	1.83	1.03	1.23	.8	2.0	2.55	1.4
23	5.27	2.93	1.53	5.33	2.28	1.73	1.03	1.33	1.65	2.05	2.35	1.4
24	7.77	3.03	1.63	4.63	2.18	1.73	.93	1.43	1.6	1.9	2.15	1.4
25	5.27	3.08	1.73	4.28	2.08	1.78	.93	1.53	1.65	1.8	1.95	1.3
26	4.72	2.98	1.73	3.93	2.83	1.73	.93	1.53	1.25	1.7	2.15	1.3
27	4.37	2.78	2.13	3.83	3.38	1.63	.83	1.53	.95	1.8	2.5	1.3
28	4.08	2.63	2.53	3.53	3.93	1.53	.83	1.43	.75	1.9	2.75	1.2
29	3.53	......	2.73	3.13	3.48	1.43	.83	1.33	1.15	1.8	2.95	1.2
30	3.28	......	2.68	3.48	2.93	1.83	.93	1.33	1.9	1.6	2.55	1.2
31	2.93	......	2.63	......	2.43	......	1.78	1.23	......	1.35	......	1.2

River not entirely closed by ice during 1906. Considerable shore ice during the latter part of February and through March, ice going out the 4th of April. At times needle ice forms on the rifts below the gage and causes backwater. During the frozen season readings were taken to water-surface through a hole cut in the ice.

Current Meter Discharge Measurements of Moose River at Moose River, N. Y.

DATE.	Hydrographer.	Width.	Area of section.	Gage height.	Discharge.
1906.		*Feet.*	*Square feet.*	*Feet.*	*Second-feet.*
April 7	Covert and Weeks	217	730	2.52	791
Sept. 22	C. C. Covert	212	440	.97	238
Sept. 23	C. C. Covert	215	630	1.72	582
Sept. 24	C. C. Covert	213	596	1.68	545

Rating Table for Moose River at Moose River, N. Y., from June 5, 1900, to December 31, 1906.

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
Feet.	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*
0.00	103	1.30	328	2.60	812	3.90	1,622
.10	115	1.40	354	2.70	862	4.00	1,700
.20	127	1.50	382	2.80	914	4.10	1,780
.30	140	1.60	412	2.90	968	4.20	1,870
.40	154	1.70	444	3.00	1,023	4.30	1,960
.50	170	1.80	477	3.10	1,080	4.40	2,060
.60	187	1.90	511	3.20	1,139	4.50	2,160
.70	205	2.00	547	3.30	1,200	4.60	2,260
.80	223	2.10	585	3.40	1,264	4.70	2,370
.90	242	2.20	626	3.50	1,330	4.80	2,480
1.00	262	2.30	669	3.60	1,399	4.90	2,590
1.10	282	2.40	715	3.70	1,470	5.00	2,700
1.20	304	2.50	763	3.80	1,545		

The above table is applicable only for open-channel conditions. It is well defined between gage heights 1 foot and 5 feet. Measurements above about 6 feet gage height are impracticable at this station owing to the flashy character of the stream and the quantities of running ice or logs during high stages. Hence estimates above gage height 6 feet should be used with caution.

Mean Daily Discharge, Second-feet, of Moose River at Moose River, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	979	......	......	802	1,250	558	930	454	242	529	282	......
2	847	......	......	802	1,220	504	1,280	438	223	304	382	......
3	872	......	......	753	1,940	454	984	454	252	304	382	......
4	872	......	......	706	2,040	422	1,130	454	412	262	354	......
5	872	......	......	827	2,090	391	984	422	304	242	354	......
6	822	......	......	878	2,620	362	729	422	214	272	354	......
7	773	......	......	777	2,190	391	1,100	391	187	316	382	......
8	773	......	......	683	1,900	706	470	323	170	354	354	......
9	822	......	......	639	1,220	1,420	504	268	170	328	382	......
10	872	......	......	639	1,220	1,130	487	268	178	316	382	......
11	822	......	......	729	1,100	878	454	248	232	444	412	......
12	797	......	......	706	1,040	777	422	268	262	428	412	......
13	725	......	......	639	1,940	706	454	289	262	428	444	......
14	656	......	......	729	4,160	540	454	268	328	428	428	......
15	634	......	......	3,610	2,860	487	422	248	262	368	444	......
16	593	......	......	3,950	1,940	454	391	228	262	354	494	......
17	593	......	......	2,980	1,810	540	362	210	242	354	626	......
18	647	......	......	2,740	1,680	487	349	210	*a*103	382	941	......
19	739	......	......	3,100	1,530	522	323	192	196	428	1,050	......
20	812	......	......	3,220	1,220	522	300	192	232	626	995	......
21	1,310	......	......	3,410	984	487	289	268	214	566	888	......
22	1,680	......	......	3,740	827	487	268	311	223	547	787	......
23	3,020	......	......	3,100	660	454	268	336	428	566	692	......
24	6,760	......	......	2,290	618	454	248	362	412	511	605	......
25	3,020	......	......	1,940	577	470	248	391	428	477	529	......
26	2,390	......	......	1,650	930	454	248	391	316	444	605	......
27	2,030	......	......	1,570	1,250	422	228	391	252	477	763	......
28	1,760	......	......	1,350	1,650	391	228	362	214	511	888	......
29	1,350	......	......	1,100	1,320	362	228	336	293	477	995	......
30	1,190	......	......	1,320	984	487	248	336	511	412	787	......
31	984	......	......	......	729	......	470	311	......	341	......	.....

a Water held back by dam above gaging station.

Monthly Discharge of Moose River at Moose River, N. Y.

[Drainage area, 346 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1906.					
January	6,760	593	1,320	3.82	*a*4.40
April	3,950	639	1,710	4.94	5.51
May	4,160	577	1,530	4.42	5.10
June	1,420	362	557	1.61	1.80
July	1,280	228	500	1.45	1.67
August	454	192	324	.936	1.08
September	511	103	267	.772	.86
October	626	242	413	1.19	1.37
November	1,050	282	580	1.68	1.87

a Uncertain, owing to ice obstruction.

SALMON RIVER NEAR PULASKI, N. Y.

Salmon river rises in the southwestern part of Lewis county, N. Y., flows first southward then northwestward, and enters Lake Ontario near Port Ontario. The basin above the gaging station is rolling and very sandy, rock lying near the surface in the upper part of the watershed, where there are also extensive tracts of original forest. The region is subject to heavy falls of snow, which sometimes accumulates in the forest areas to a depth of several feet and the gradual melting of which during March and April feeds the stream.

The gaging station was established by Robert E. Horton, September 5, 1900. It is located at Fox bridge, near Pulaski, N. Y.[a]

The stream bed is of gravel and cobble, relatively flat and shallow. The bridge consists of two spans, 183.5 feet between abutments. There are two small overflow channels and a flood plain.

Current-meter measurements are made at 5-foot intervals across the stream from the down-stream side of the bridge. The initial point for soundings is the face of the abutment at the right end of the bridge on the down-stream side.

The original gage was a vertical board scale attached to the up-stream end of the center pier, having its zero mark 11.59 feet below the bench-mark, which was the top of the capstone of the central pier, up-stream end. This gage was carried away by ice in the winter of 1901–2, and was replaced July 23, 1902, by a standard weight-and-chain gage, having its datum at elevation 12.79 feet below the bench-mark. The gage readings are taken twice each day by S. J. Fox, and have been continued throughout summer and winter, the winter readings being obtained by observing the height to which the water rises in a hole in the ice. Owing to the obstruction of the river channel by ice, the discharge for the winter period has not been estimated.

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[a] The location of the gaging station is shown on the Pulaski topographic atlas sheet of the United States Geological Survey.

Drainage Areas Tributary to Salmon River.a

LOCALITY.	Area in Square Miles.		
	Place to place.	Sub-total.	Total.
Salmon river above Osceola	44.04	....	44.04
Salmon river, Osceola to junction of north branch	26.03	....	70.07
North branch, Salmon river, above Mill creek	83.05	....	....
Mill creek	14.25	97.30	....
North branch, Salmon river, junction of Mill creek to mouth	2.35	99.65	169.72
Salmon river, junction of north branch to Salmon Falls	23.70	....	193.42
Salmon river, Salmon Falls to junction of Beaver Dam brook	6.05	....	199.47
Beaver Dam brook	15.44	....	214.47
Salmon river, Beaver Dam brook to Sandbank	1.03	....	215.94
Salmon river, Sandbank to Orwell brook	1.28	....	217.22
Orwell brook	23.13	....	240.35
Salmon river, Orwell brook to Trout brook	2.10	....	242.45
Trout brook	14.40	....	256.85
Salmon river, Trout brook to Fox bridge	1.92	....	258.77
Salmon river, Fox bridge to Pulaski	7.49	....	266.26
Salmon river, Pulaski to mouth	5.90	....	272.16

a From U. S. G. S. topographic maps.

Mean Daily Gage Height, in Feet, of Salmon River at Fox Bridge, near Pulaski, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	......	......	......	4.42	4.02	2.92	4.45	2.62	2.3	3.3	3.22	3.5
2	......	......	......	4.15	3.9	2.88	3.8	2.52	2.3	2.95	3.1	3.15
3	......	......	......	4.0	4.38	2.82	3.3	2.55	2.38	2.78	3.05	2.92
4	......	......	......	4.25	4.65	2.8	3.75	2.65	2.65	2.5	3.0	3.1
5	......	......	......	4.85	4.82	2.78	4.18	2.7	2.55	2.58	3.0	3.1
6	......	......	......	4.45	4.32	2.95	3.45	2.7	2.4	2.68	2.98	3.18
7	......	......	......	4.12	3.9	2.92	3.15	2.75	2.38	3.82	2.92	3.4
8	......	......	......	4.0	3.6	3.65	2.95	2.65	2.4	3.5	2.88	3.25
9	......	......	......	4.08	3.55	4.35	2.88	2.55	2.32	3.1	2.85	3.22
10	......	......	......	4.08	3.80	3.65	2.9	2.5	2.3	3.55	2.92	3.15
11	......	......	......	4.2	3.78	3.45	3.32	2.62	2.3	3.48	3.18	3.1
12	......	......	......	4.22	3.55	3.18	3.15	2.68	2.25	3.22	3.4	3.0
13	......	......	......	4.5	3.7	2.98	2.9	2.58	2.25	3.05	3.25	3.0
14	......	......	......	4.72	5.1	2.95	2.75	2.5	2.3	2.98	3.12	3.05
15	......	......	......	6.9	4.48	2.82	2.7	2.5	2.25	2.9	2.98	3.25
16	......	......	......	6.35	3.88	2.8	2.65	2.45	2.25	2.8	2.98	4.5
17	......	......	......	5.75	3.58	2.8	2.68	2.42	2.28	2.75	2.95	4.3
18	......	......	......	5.58	3.48	2.8	2.7	2.38	2.25	2.7	3.02	3.7
19	......	......	......	5.52	3.32	2.88	2.65	2.35	2.2	2.62	4.08	3.32
20	......	......	......	5.6	3.2	2.82	2.65	2.35	2.25	4.15	3.88	3.25
21	......	......	......	5.15	3.12	2.72	2.7	2.38	2.25	3.95	3.52	3.23
22	......	......	......	5.1	3.1	2.7	2.72	2.45	2.32	3.45	3.58	3.13
23	......	......	......	5.02	3.02	2.78	2.68	2.45	2.58	3.18	3.52	3.0
24	......	......	......	4.45	3.0	2.8	2.65	2.38	2.72	3.02	3.4	2.95
25	......	......	......	4.20	2.98	2.78	2.6	2.35	2.48	3.12	3.25	3.02
26	......	......	......	4.02	3.0	2.7	2.52	2.35	2.4	3.42	3.22	3.18
27	......	......	......	4.02	3.28	2.62	2.5	2.35	2.4	3.3	3.92	3.10
28	......	......	5.28	4.08	3.75	2.6	2.5	2.35	2.48	3.48	4.6	3.0
29	......	......	5.2	4.0	3.3	2.68	2.5	2.35	2.45	3.75	4.05	3.0
30	......	......	4.95	4.05	3.12	3.3	2.52	2.35	3.32	3.55	3.5	.
31	......	......	4.78	......	3.0	......	2.65	2.3	......	3.4	....	.

Current Meter Discharge Measurements on Salmon River at Fox Bridge, near Pulaski, N. Y.

No.	DATE.	Hydrographer.	Meter number.	Width.	Area of section.	Gage height.	Discharge.
	1906.			*Feet*	*Square feet.*	*Feet.*	*Second-feet.*
31..	April 18	E. F. Weeks	717	182	787	5.60	3,980
32..	Aug. 18	C. C. Covert......	357	170	198	2.40	94
33..	Sept 20	C. C. Covert......	357	158	176	2.25	54
34..	Oct. 25	Barrows and Covert....	130	175	312	3.20	450

Rating Table for Salmon River at Fox Bridge, near Pulaski, N. Y.

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
Feet.	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*
2.20	60	3.60	781	5.00	2,640	6.40	6,530
2.30	84	3.70	865	5.10	2,840	6.50	6,930
2.40	110	3.80	965	5.20	3,020	6.60	7,340
2.50	144	3.90	1,060	5.30	3,240	6.70	7,750
2.60	181	4.00	1,180	5.40	3,460	6.80	8,190
2.70	218	4.10	1,300	5.50	3,700	6.90	8,620
2.80	265	4.20	1,420	5.60	3,950	7.00	9,070
2.90	312	4.30	1,550	5.70	4,200	7.10	9,540
3.00	364	4.40	1,680	5.80	4,490	7.20	10,000
3.10	422	4.50	1,830	5.90	4,780	7.30	10,500
3.20	480	4.60	1,980	6.00	5,100	7.40	11,000
3.30	550	4.70	2,140	6.10	5,430	7.50	11,520
3.40	620	4.80	2,300	6.20	5,770	7.60	12,060
3.50	697	4.90	2,470	6.30	6,150	7.70	12,600

Mean Daily Discharge, Second-feet, of Salmon River at Fox Bridge, near Pulaski, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1				1,720	1,200	323	1,750	190	84	550	497	697
2				1,360	1,060	300	965	153	84	335	422	451
3				1,180	1,650	276	550	162	103	253	393	323
4				1,480	2,060	265	915	199	199	144	364	422
5				2,380	2,340	253	1,780	218	162	171	364	422
6				1,750	1,580	335	655	218	110	208	349	465
7				1,320	1,060	323	451	241	103	990	323	620
8				1,180	781	823	335	199	110	697	300	515
9				1,200	739	1,620	300	162	91	422	288	497
10				1,200	965	823	312	144	84	739	323	451
11				1,420	940	655	567	190	84	676	465	422
12				1,450	739	465	451	208	72	497	620	364
13				1,830	865	349	312	171	72	393	515	364
14				2,180	2,840	335	241	144	84	349	436	393
15				8,620	1,790	276	218	144	72	312	349	515
16				6,340	1,040	265	199	125	72	265	349	1,830
17				4,350	760	265	208	118	78	241	335	1,550
18				3,880	676	265	218	103	72	218	378	865
19				3,760	567	300	199	97	60	190	1,260	567
20				3,950	480	276	199	97	72	1,360	1,040	515
21				2,930	436	229	218	103	72	1,120	718	532
22				2,840	422	218	229	125	91	655	760	465
23				2,690	378	253	208	125	171	455	718	364
24				1,750	364	265	199	103	229	378	620	335
25				1,420	349	253	181	97	134	436	515	378
26				1,200	364	218	153	97	110	637	497	465
27				1,200	532	190	144	97	110	550	1,090	422
28			3,190	1,260	915	181	144	97	134	676	1,980	364
29			3,020	1,180	550	208	144	97	125	915	1,240	364
30			2,550	1,240	436	550	153	97	567	739	697	364
31			2,260	......	364	......	199	84	......	620	......	865

Monthly Discharge of Salmon River at Fox Bridge, near Pulaski, N. Y.
[Drainage area, 259 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1906.					
April	8,620	1,180	2,350	9.07	10.1
May	2,840	364	945	3.65	4.21
June	1,620	181	379	1.46	1.63
July	1,750	144	400	1.54	1.78
August	241	84	142	.548	.621
September	567	60	120	.463	.523
October	1,360	144	514	1.98	2.28
November	1,980	288	607	2.34	2.61
December	1,830	323	553	2.13	2.46

GENESEE RIVER BASIN.

DESCRIPTION OF BASIN.

Genesee river rises in Potter county, Pa., eight or ten miles south of the New York-Pennsylvania boundary, flows northwestward for about thirty-two miles by general course, then turns to the northeast, and empties into Lake Ontario, seven miles north of Rochester. The entire length of the stream, following bends, is about 135 miles, and the drainage area is 2,496 square miles.

In the northern counties the surface is rolling, with long, easy slopes, except along the streams, which usually lie in deep ravines hemmed in by steep banks. On the whole there is a gradual rise away from the lakes, and in the upper half of the basin the country becomes rough and is broken by ridges, the summits of which attain elevations of from 2,000 to 2,500 feet above tide.

In the thirty-nine miles between Belmont, in central Allegany county, and Portage, in southwestern Livingston county, the fall of the water-surface is 253 feet, an average of 6.4 feet per mile. At Portage the river plunges down in three magnificent falls, and thence nearly to Mount Morris flows at the bottom of a deep gorge. From Mount Morris to Rochester the valley is broad and open and the stream is bordered by meadows subject to occasional overflow. At Rochester there is another abrupt descent over three heavy falls, amounting to about 260 feet within the city.

The series of remarkable lakes tributary to the Oswego basin is continued westward into the basin of the Genesee and includes

Conesus, Hemlock, Canadice, and Honeoye lakes. These lakes serve as natural reservoirs and have inlets draining considerable areas at their upper ends. The slopes adjacent to the lakes themselves are narrow and steep and are drained by gulleys and torrential brooks. The area below the lakes is rolling and the soil is rich and extensively cultivated. The areas and elevations of these lakes are shown in the following table:

Areas and Elevations of Lakes in Genesee River Basin.[a]

LAKE.	Elevation.	Water-surface area.	Drainage area.	Per cent water-surface.
	Feet.	*Square miles.*	*Square miles.*	
Hemlock lake	896	2.8	46.8	6.12
Canadice lake	1,092	.7	12.6	5.57
Honeoye lake	800	2.5	39.6	6.41

[a] These lake basins are shown on the Honeoye, Canandaigua, Naples and Wayland topographic atlas sheets of the United States Geological Survey, from which the areas have been taken, with the exception of those for Hemlock and Canadice lakes, which are from surveys of Rochester water-works.

Above all the private dams at Rochester the State formerly maintained a dam for diverting water to the Erie canal, and in the basin of Black creek, one of the upper tributaries of the Genesee from the west, are two reservoirs, owned by the State, also used for the benefit of the Erie canal.

Cuba reservoir, on the Genesee-Allegheny divide, receives the drainage from a tributary area of 26.6 square miles. The storage volume is 454,000,000 cubic feet. The overflow from this reservoir enters Allegheny river. The storage water may be turned into the summit level of the abandoned Genesee Valley canal and thence into Genesee river.

Drainage Areas of Tributaries of Genesee River.[a]

NAME OF STREAM.	AREA IN SQUARE MILES.		
	Tributary.	GENESEE RIVER.	
		Above tributary.	Below tributary.
Cryder creek	43.3	99.9	143.2
Chenunda creek	30.0	181.0	210.0
Dyke's creek	68.3	214.0	282.3
Vandemark creek	21.6	301.3	322.9
Knight's creek	22.3	323.9	346.2
Phillips creek	32.3	372.8	405.1
Vancampens creek	55.7	410.4	466.1
Angelica creek	82.1	481.1	563.2
White creek	15.9	569.2	585.1
Black creek	31.1	595.5	626.6

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[a] From an early report on Genesee river storage.

Drainage Area of Tributaries of Genesee River — (Continued).

NAME OF STREAM	AREA IN SQUARE MILES.		
	Tributary.	GENESEE RIVER.	
		Above tributary.	Below tributary.
Crawford creek	11.8	637.6	649.4
Caneadea creek	63.3	651.0	714.3
Cold creek	41.0	745.3	786.3
Rush creek	35.3	787.0	822.3
Wiscoye:			
East Coy creek	59.9	....	....
West Coy creek	48.7	833.6	942.2
Wolf creek	19.3	974.9	994.2
Silver Lake outlet	30.4	1,029.2	1,059.6
Coshaqua creek	82.0	1,059.6	1,141.6
Canaseraga creek	258.7	1,148.4	1,407.1
Beards creek	41.3	1,423.1	1,464.4
Conesus Lake outlet	88.8	1,555.5	1,643.9
Honeoye creek	262.6	1,675.9	1,938.5
Allen's creek	198.1	1,947.1	2,145.2
Black creek	211.8	2,168.5	2,380.0
Genesee river, total at mouth	....	....	2,445.6

GENESEE RIVER AT ELMWOOD AVENUE, ROCHESTER, N. Y.

This station was established by Robert E. Horton, February 9, 1904. It is located at the Elmwood Avenue bridge, in Rochester, N. Y.

The stream bed is of gravel and is clean and fairly permanent. The bridge consists of six spans of about 125 feet each. Conditions are favorable for the use of a current-meter. This gage is located above the State diverting dam, which causes, however, but little fluctuation in the level.

Discharge measurements are made from the down-stream side of Elmwood Avenue bridge. The initial point for soundings is the top of the face of the left abutment, down-stream side. A standard cypress staff gage, which is read under the direction of E. A. Fisher, city engineer, is secured to the down-stream face of the first pier from the right-hand abutment of the bridge. The gage is sixteen feet long and is graduated decimally with galvanized-iron division marks.

Comparative Elevations.

	Rochester City datum.	Barge Cana datum.
Zero, Elmwood avenue gage	245.591	506.848
Crest, Johnston and Seymour dam	241.91	503.16

Mean Daily Elevation of Water-surface (Barge Canal Datum) above Johnson and Seymour Dam, on Genesee River at Rochester, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	504.81	503.56	503.01	506.11	503.96	503.16	503.51	504 61	501.51	501.11	502.01	504.81
2	504.36	503.31	502.91	505.46	503.76	503.11	503.71	504.41	501.61	501.06	501.36	504.01
3	504.61	503 36	502.66	505.01	503.81	502.91	503.41	504.16	502 61	500.86	501.56	503.96
4	504.51	503.36	502.81	504.81	503.63	503.21	503.51	503.86	502.71	501 16	501.61	504.41
5	503.91	504.01	503.71	504 62	503.56	503.31	503.41	503.71	501.66	501.01	502.86	504.61
6	503.71	503.21	503.11	504.71	503.61	503.36	503.41	503.71	501.21	501.11	502.96	504.16
7	503.61	503.14	503.13	504.66	503.71	503.96	503.36	503.46	501.56	500.91	503.26	504.01
8	503.91	503.11	502.81	504.51	503.76	504.36	503.26	503.36	501.26	501.46	503.76	504.11
9	503.66	503.11	503.01	504.51	503.76	504.26	503.46	503.23	501.91	500.66	503.66	503.86
10	503.56	503.06	503 11	504.31	503.71	504.01	503.36	503.41	501.39	500.71	503.61	504.21
11	503.51	502.87	503.03	504.16	503.61	503.91	503.36	503.51	503.06	500.71	503 56	503.96
12	503.81	503.61	503 81	504.31	503.51	503 76	503.31	503.61	503.16	500.66	503.31	503.83
13	503.86	502 71	503.56	504.76	503.46	503.88	503.61	503.81	503.31	500.66	503.36	503.71
14	503.81	502 81	503.51	504.51	503.61	503.71	503.86	503.61	503.36	500.76	503.31	503.66
15	504.31	503.01	503.41	504.29	503.61	503.56	504.41	503.46	503.26	502.51	503.21	503.46
16	504.41	502.61	503.51	504.26	503.66	503.46	504.51	503.56	503.56	502.66	503.19	502.71
17	504.26	502.76	503 51	504.31	503.61	503.31	504.31	503.51	503.71	502.31	503.16	503.31
18	504.06	502 51	503.56	504.31	503.51	503 96	503.81	503.46	503.16	501.91	503.01	503.06
19	504.01	503.51	504.99	504 31	503.46	504.96	503.61	503.41	503.11	501.06	503.31	503.01
20	504.01	502.81	507.09	504.26	503.41	504.81	503.31	503.41	502.96	501.16	503.01	502.86
21	504 06	502.61	508.16	504.33	503.51	504.46	503.31	503 31	502.66	502.76	502.81	503.21
22	504 31	502 51	508 81	507.31	503.26	504.61	503.16	502.86	503.11	503.41	502.96	503.61
23	503 97	502 56	508 86	505 71	503 11	505 66	503.11	501 84	501.71	503 31	502.56	505.66
24	503 86	502 56	508 69	505 61	503 01	505 16	502.76	501.81	502.11	503.11	502.68	504.96
25	503.69	502.76	508 96	505.01	503.16	505.21	503 03	501 56	501.56	503.11	502.18	504.61
26	503.71	503.71	509 01	504 66	502.96	504 81	503 31	501.31	500.66	503.16	503.01	504.11
27	503.76	503.11	508 83	504.41	503.16	504.11	503 26	501.76	500.61	503.01	502.36	504.01
28	503.76	502.96	508 59	504.26	503.21	504 01	503 16	501.71	500.66	502.76	502.21	503.71
29	503.91	......	508.31	504.16	503.26	503.81	503 31	501.56	500.76	503.26	502.61	503.81
30	503.71	......	507.86	504.11	503 21	503.71	504.16	501.31	500.61	502.96	504.01	505.11
31	503.56	......	506.46	......	503.19	......	504.56	501.26	......	502.73	......	505.14

Mean Daily Elevation of Water-surface (Barge Canal Datum) above Johnson and Seymour Dam, on Genesee River at Rochester, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	504.56	503.61	503.36	507.01	503.71	503.91	503.71	503.11	503.16	502.41	504.26	504.26
2	504.16	503.56	503.41	506.21	503.71	503.71	503.16	503 16	503 16	502 46	504.46	504.26
3	504.06	503.36	503 46	505.61	503.81	503.91	502.91	503.06	503.01	503 21	504.41	504.21
4	504.08	503.51	503.76	505.21	504.91	503.66	502.66	503.21	502.71	502 96	504.51	504.01
5	504.18	503.01	504 31	505.21	504.61	503.56	504 11	503.66	502 61	502.51	504.41	503.76
6	504.78	503.16	504 21	506.21	504.71	503.51	504 01	503.61	502 41	502.11	504.31	504.01
7	505.18	502.91	503 96	506.16	504.41	503 41	503.81	503.41	502.81	503.41	504.11	506.61
8	503.66	502.16	503.81	505.41	504 21	503 51	503.61	503.31	502.21	505.01	504.01	507.21
9	503.46	503.11	504.46	505.11	504.01	503 81	503.21	503.51	502.81	504.46	503.91	505.76
10	503.41	503.11	503 71	505 86	503 91	503 76	503.16	503.26	502.11	504.11	503.81	505.31
11	503.46	503.41	503.71	506.56	504.01	503.56	502 91	503.31	501.71	504.36	503.91	505.16
12	503.61	502.91	503.56	506.31	504.01	503 61	502.86	503.36	501.21	504.41	503.91	505.46
13	503.61	503.11	503.46	506.06	503.96	503 51	502.56	503.56	501.31	504.26	504.31	505.06
14	503.76	503.21	503.46	505.26	503.91	503.46	502.16	503.41	500.51	504.16	504.36	504.76
15	503.61	503.41	503.36	505.06	504.01	503.31	502.61	503.16	500.51	503.91	504.41	......
16	503.66	503.21	503.41	505.16	504.01	503.26	502.81	503.06	502.71	503.76	504.31	......
17	503.81	503.01	503.31	505.21	503.91	503.41	502.71	502.71	502.41	503.61	504.21	......
18	504.11	503.51	503.36	504.91	503.96	503.61	502.61	502.21	500.86	503.51	504.31	......
19	503.86	503.21	503.21	504.66	504.21	503.66	502.71	503.41	500.61	503.46	505.71	......
20	503.91	503.21	501.61	504.41	504.11	503.71	502.61	502.31	500.66	503.66	505.96	......
21	504.31	503.41	502.71	504.26	503.91	503.51	502.21	501.61	500.76	504.41	505.46	......
22	505.66	503.56	503.11	504.16	503.71	503.41	502 86	503.76	500.86	504.66	506.91	......
23	506.01	503.76	502 81	504.01	503.66	503.51	502.56	503.61	502.01	504.31	506.56	......
24	506.11	503.81	503.01	504.06	503.66	503.56	501.61	503.56	503.11	504.16	505.71	......
25	505.76	504.01	503.41	503.96	503.61	503.36	501.41	503.81	503.31	504.16	505.21	......
26	505.06	503.93	503 21	503.91	504.01	503.21	501.36	503.76	503.21	504.91	504.86	......
27	504.36	503.96	504.01	503.81	503.86	503.21	501.31	503.56	502.16	504.81	504.61	......
28	504.11	503.31	506.76	503.76	504.11	503.06	501.41	503.56	501.61	504.46	504.51	......
29	504.06	......	507.46	503.81	504.61	502.96	502.21	503.61	502.16	504.11	504.66	......
30	503.91	......	506.56	503.71	504.86	503.16	502.11	503.56	502.31	504.21	504.46	......
31	503.81	......	506.61	......	504.21	......	502.21	503.41	......	504.06	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Genesee River at Elmwood Avenue Bridge, Rochester, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	509.7	508.8	508.4	513.2	508.5	508.8	508.2	507.8	508.0	507.9	509.7	509.3
2	509.6	508.7	508.7	512.3	508.6	508.7	508.1	507.9	507.9	508.0	509.7	509.2
3	509.6	508.7	508.2	510.9	508.9	508.6	508.1	508.0	507.8	508.3	509.7	509.1
4	509.2	508.7	508.6	510.5	510.2	508.5	508.9	507.9	507.8	508.1	509.6	509.0
5	509.0	508.6	509.6	510.7	509.7	508.4	509.3	508.3	507.8	508.1	509.5	508.9
6	510.0	508.6	509.8	511.6	509.8	508.2	508.7	508 4	507.8	508.2	509.3	508.8
7	509.6	508.6	508.8	511.3	509.6	509.4	508.5	508.3	507.7	509.2	509.1	513.3
8	509.1	508.5	508.7	510.7	509.2	509.2	508.3	508.3	507.7	510.2	509.0	513.5
9	509.1	508.5	508.6	510.3	508.9	509.4	508.1	508.4	507.7	509.5	508.8	511.7
10	509.0	508.5	508.5	511.7	508.8	508.6	508.1	508.4	507.7	509.1	508.7	510.3
11	508.8	508.4	508.3	512.6	509.1	508.5	508.1	508.3	507.7	509.2	508.7	509.8
12	508.6	508.4	508.0	512.2	509.0	508.55	508.0	508.3	507.7	509.5	509.0	511.1
13	508.9	508.1	508.3	511.2	508.8	508.5	508.0	508.5	507.7	509.3	509.3	510.0
14	508.6	508.1	508.2	510.5	508.7	508.4	507.9	508.3	507.7	508.9	509.8	509.7
15	508.4	508.2	508.3	510.2	508.9	508.2	507.85	508.2	507.7	508.8	509.6	509.9
16	508.6	508.7	508.2	510.7	508.9	508.2	507.8	508.2	507.7	508.7	509.5	512.7
17	508.8	508.7	508.1	510.5	508.8	508.2	507.8	508.1	507.7	508.6	509.3	512.3
18	509.0	508.5	508.4	510.0	508.8	508.5	507.9	508.0	507.7	508.5	509.5	510.7
19	508.9	508.3	508.1	509.7	509.2	508.6	508.1	507.9	507.7	508.4	511.4	510.2
20	508.8	508.1	508.0	509.5	509.0	508.6	508.0	507.8	507.7	508.6	511.7	509.7
21	509.4	508.2	508.2	509.2	508.7	508.4	507.9	507.8	507.7	510.1	511.1	509.3
22	511.6	508.5	508.3	509.0	508.5	508.3	507.9	508.1	507.8	509.8	513.1	508.8
23	512.3	508.7	508.1	508.9	508.4	508.2	507.9	508.1	508.0	509.3	512.5	508.8
24	512.0	508.7	508.1	509.0	508.3	508.2	507.9	508.5	508.05	509.2	511.3	508.7
25	511.6	508.8	508.3	508.9	508.6	508.2	507.8	508.7	508.1	509.0	510.4	509.7
26	510.2	508.8	508.2	508.8	508.9	508.2	507.7	508.5	508.05	510.3	510.1	509.9
27	509.4	508.5	509.1	508.7	508.6	505.2	507.7	508.2	508.0	510.0	509.9	509.7
28	509.1	508.3	513.2	508.6	508.6	508.1	507.7	508.1	507.8	509.3	509.7	509.7
29	508.8	......	513.9	508.5	509.9	508.0	507.8	508.1	507.8	509.1	509.8	509.4
30	509.1	......	512.3	508.5	509.3	508.2	507.9	508.2	507.8	509.2	509.5	509.0
31	508.8	......	512.8	......	508.9	......	507.9	508.0	......	509.2	......	509.0

Current Meter Discharge Measurements on Genesee River at Elmwood Avenue, Rochester, N. Y.

No.	DATE.	Hydrographer.	Meter No.	Width.	Area of section.	Mean velocity.	Gage height.	Discharge.
	1906.			*Feet.*	*Square feet.*	*Feet per second.*	*Feet.*	*Second-feet.*
A..	*a*Feb. 14	Covert and Weeks	754	306	1,710	0.43	1.40	728
B..	*b*Feb. 15	Covert and Weeks	754	360	1,020	0.88	1.53	894
28..	Mar. 28	Weeks and Casey	717	383	3,160	4.47	6.85	14,120
29..	Mar. 29	Weeks and Casey.	717	383	3,320	4.55	7.32	15,090
30..	Mar. 30	Weeks and Casey.	717	383	2,680	3.58	5.64	9,580
31..	Mar. 31	Weeks and Casey.	717	383	2,860	4.33	6.06	12,370
32..	Mar. 31	Weeks and Casey.	717	383	2,940	4.54	6.31	13,340
33..	April 1	Weeks and Casey.	717	384	3,040	4.67	6.60	14,190
34..	April 1	Weeks and Casey.	717	383	3,050	4.17	6.36	12,960
35..	April 2	Weeks and Casey.	717	376	2,480	3.56	5.08	8,830
36..	April 2	Weeks and Casey.	717	375	2,330	3.08	4.70	7,160
37..	April 3	Weeks and Casey.	717	374	2,100	2.79	4.10	5,860

a Measurements made under ice cover average thickness of ice 0.50; gage heights to under ice surface, 1.00; measurement made about one-quarter mile above regular section.

b Measurement made under ice cover at regular section, average thickness of ice 0.46; some needle ice; gage height to under ice surface, 1.17.

Rating Table for Genesee River at Rochester, N. Y.

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
Feet.	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*
1.00	400	3.70	5,080	6.40	12,600	9.10	21,760
1.10	490	3.80	5,320	6.50	12,900	9.20	22,120
1.20	580	3.90	5,560	6.60	13,220	9.30	22,480
1.30	670	4.00	5,800	6.70	13,540	9.40	22,840
1.40	760	4.10	6,060	6.80	13,860	9.50	23,200
1.50	850	4.20	6,320	6.90	14,180	9.60	23,580
1.60	1,000	4.30	6,580	7.00	14,500	9.70	23,960
1.70	1,150	4.40	6,840	7.10	14,820	9.80	24,340
1.80	1,300	4.50	7,100	7.20	15,140	9.90	24,720
1.90	1,450	4.60	7,380	7.30	15,460	10.00	25,100
2.00	1,600	4.70	7,660	7.40	15,780	10.10	25,480
2.10	1,780	4.80	7,940	7.50	16,100	10.20	25,860
2.20	1,960	4.90	8,220	7.60	16,440	10.30	26,240
2.30	2,140	5.00	8,500	7.70	16,780	10.40	26,620
2.40	2,320	5.10	8,780	7.80	17,120	10.50	27,000
2.50	2,500	5.20	9,060	7.90	17,460	10.60	27,400
2.60	2,700	5.30	9,340	8.00	17,800	10.70	27,800
2.70	2,900	5.40	9,620	8.10	18,160	10.80	28,200
2.80	3,100	5.50	9,900	8.20	18,520	10.90	28,600
2.90	3,300	5.60	10,200	8.30	18,880	11.00	29,000
3.00	3,500	5.70	10,500	8.40	19,240	11.10	29,400
3.10	3,610	5.80	10,800	8.50	19,600	11.20	29,800
3.20	3,940	5.90	11,100	8.60	19,960	11.30	30,200
3.30	4,160	6.00	11,400	8.70	20,320	11.40	30,600
3.40	4,380	6.10	11,700	8.80	20,680	11.50	31,000
3.50	4,600	6.20	12,000	8.90	21,040		
3.60	4,840	6.30	12,300	9.00	21,400		

Mean Daily Discharge, Second-feet, of Genesee River at Rochester, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	8,220	7,660	8,500	760	1,150	400	760	760	490
2	......	......	3,300	12,300	6,840	8,500	760	850	490	850	760	580
3	......	......	13,220	12,000	3,500	5,320	850	760	490	760	760	580
4	......	......	15,460	8,780	3,100	3,500	850	1,000	580	670	670	580
5	......	......	15,460	6,320	2,900	3,100	760	1,000	580	580	670	580
6	......	......	14,180	5,560	2,700	3,300	850	760	580	490	670	580
7	......	......	13,540	5,320	2,500	2,900	1,000	760	490	490	670	580
8	......	......	18,160	4,840	2,320	2,320	1,300	670	490	490	670	580
9	......	20,500	19,960	4,840	2,140	2,140	1,000	580	490	490	670	580
10	......	......	21,760	9,620	1,960	2,700	1,450	490	490	490	580	580
11	......	19,960	19,600	13,220	1,780	2,700	1,960	490	490	490	580	580
12	......	14,500	16,440	......	1,690	2,320	2,320	490	490	1,600	580	580
13	......	*a*	10,500	......	1,600	1,780	2,700	580	490	1,780	490	580
14	......	......	6,320	......	1,450	1,450	3,100	580	490	2,500	490	580
15	......	......	3,940	4,600	1,960	1,450	1,960	490	490	2,140	490	580
16	......	......	4,160	4,160	3,500	1,450	1,450	490	490	1,450	490	580
17	......	......	3,300	4,160	3,720	1,300	1,300	490	490	1,150	490	580
18	......	......	2,700	4,160	2,900	1,000	850	490	490	1,000	490	580
19	......	......	2,500	9,620	3,100	850	760	490	400	850	490	580
20	......	......	......	8,500	5,320	805	670	490	400	760	490	580
21	......	......	5,800	5,560	5,080	805	670	580	490	760	490	580
22	......	......	......	6,840	4,160	1,150	670	670	490	670	490	580
23	......	......	11,700	7,100	3,500	1,300	670	760	490	850	490	580
24	......	......	16,780	6,580	3,100	1,300	760	670	400	1,300	490	580
25	......	......	17,460	6,580	2,700	1,000	1,150	670	400	1,450	490	670
26	......	......	23,200	6,320	2,500	850	1,960	670	580	1,150	490	760
27	......	......	26,620	5,560	2,140	760	1,780	580	670	1,000	490	2,500
28	......	......	27,000	5,080	2,700	850	1,450	580	850	1,000	490	6,840
29	......	......	21,760	10,800	3,100	760	1,300	490	760	1,000	490	13,220
30	......	......	12,300	10,500	2,500	670	2,140	490	760	850	490	6,580
31	......	......	7,660	......	3,940	......	1,450	400	......	760	......	4,160
Mean	......	......	13,390	7,300	3,160	2,230	1,310	635	523	986	562	1,570

a River frozen February 13 to March 1, inclusive.

Mean Daily Discharge, Second-feet, of Genesee River at Rochester, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	3,100	......	......	9,060	2,140	1,300	1,000	3,720	670	400	670	5,080
2	3,300	......	......	6,320	1,960	1,000	1,000	3,500	670	400	715	2,320
3	3,720	......	......	4,840	1,960	1,000	1,000	2,900	670	400	760	1,600
4	4,380	......	......	3,940	1,600	1,000	1,000	2,140	625	400	850	3,720
5	2,140	......	......	3,500	1,450	850	1,000	1,600	580	400	850	4,840
6	3,100	......	......	3,720	1,450	1,600	1,000	1,300	535	400	760	2,900
7	1,960	......	......	3,500	1,450	2,500	850	1,150	490	400	850	2,320
8	1,780	......	......	3,500	1,600	3,500	850	1,000	580	400	1,960	2,140
9	1,600	......	......	2,900	1,600	4,600	760	850	580	400	1,600	2,140
10	1,600	......	......	2,500	1,600	2,700	760	1,300	490	400	1,530	2,700
11	1,600	......	......	2,500	1,450	2,140	715	1,300	400	400	1,450	2,320
12	1,600	......	......	3,500	1,300	1,780	760	1,300	490	400	1,150	1,960
13	3,100	......	......	3,500	1,300	2,500	1,450	1,300	490	400	1,150	1,600
14	1,600	......	......	3,300	1,450	1,780	1,780	1,450	670	400	1,000	1,450
15	4,380	......	......	2,900	1,600	1,450	3,300	1,150	850	490	850	1,300
16	5,560	......	......	2,500	1,600	1,150	2,700	1,300	760	580	850	1,600
17	5,320	......	......	2,700	1,450	1,000	1,960	1,300	670	580	850	850
18	3,940	......	1,960	2,700	1,300	3,500	1,450	1,150	760	580	850	760
19	3,100	......	16,780	2,700	1,300	5,320	1,300	1,000	850	580	850	670
20	2,700	......	14,820	2,900	1,300	4,380	1,000	850	670	580	850	580
21	2,500	......	23,020	4,840	1,300	3,500	1,000	850	670	850	760	850
22	2,500	......	25,100	13,220	1,300	4,600	1,000	670	580	1,000	715	1,600
23	2,320	......	24,150	9,900	1,300	7,660	850	580	580	1,000	670	7,380
24	2,320	......	24,720	5,560	1,300	5,560	760	580	670	925	625	4,380
25	2,320	......	25,860	3,940	1,300	3,720	760	580	400	850	580	3,720
26	2,140	......	25,860	3,500	1,300	2,700	760	580	400	850	580	3,100
27	1,960	......	24,720	3,100	1,300	2,320	760	580	400	850	625	2,700
28	......	......	23,200	2,700	1,300	1,960	760	580	400	760	4,600	2,320
29	......	......	21,400	2,500	1,300	1,600	760	535	400	670	7,940	1,960
30	......	......	18,340	2,320	1,300	1,450	4,160	580	400	850	4,600	5,800
31	......	......	12,600	......	1,300	......	4,380	580	......	670	......	6,580
Mean	2,800	......	20,200	4,150	1,460	2,670	1,340	1,230	580	589	1,400	2,690

Mean Daily Discharge, Second-feet, of Genesee River at Rochester, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	3,500	1,600	1,150	12,900	1,300	2,320	850	490	670	580	3,500	1,690
2	3,300	1,600	1,600	10,200	1,450	1,600	760	580	580	670	3,500	1,690
3	3,300	1,600	850	6,320	1,960	1,450	760	670	490	1,000	3,500	1,690
4	2,500	1,600	1,450	5,320	4,600	1,300	1,960	580	490	760	3,300	1,650
5	2,140	1,600	2,900	5,800	3,500	1,150	2,700	1,000	490	760	3,100	1,650
6	4,160	1,450	3,720	8,220	3,720	850	1,600	1,150	490	850	2,700	1,600
7	3,300	1,450	1,780	7,380	3,300	2,900	1,300	1,000	400	2,500	2,320	11,480
8	2,320	1,300	1,600	5,800	2,500	2,500	1,000	1,000	400	4,600	2,140	11,630
9	2,320	1,300	1,450	4,840	1,960	2,900	760	1,150	400	3,100	1,780	8,500
10	2,140	1,300	1,300	8,500	1,780	1,450	760	1,150	400	2,320	1,600	3,610
11	1,780	1,150	1,000	11,100	2,320	1,300	760	850	400	2,500	1,600	3,500
12	1,450	1,150	670	9,900	2,140	1,300	670	1,000	400	3,100	2,140	5,930
13	1,960	760	1,000	7,100	1,780	1,300	670	1,300	400	2,700	1,690	3,560
14	1,450	760	850	5,320	1,600	1,150	580	1,000	400	1,960	3,500	3,500
15	1,150	850	1,000	4,600	1,960	850	490	850	400	1,780	1,780	3,560
16	1,450	1,600	850	5,800	1,960	850	490	850	400	1,600	1,740	11,400
17	1,960	1,600	760	5,320	1,780	850	490	760	400	1,450	1,690	8,640
18	2,140	1,300	760	4,160	1,780	1,300	580	670	400	1,300	1,740	5,800
19	1,960	1,000	760	3,500	2,500	1,450	760	580	400	1,150	6,000	3,610
20	1,780	760	670	3,100	2,140	1,450	670	490	400	1,450	8,500	3,500
21	2,900	850	850	2,500	1,600	1,150	580	490	400	4,380	5,930	1,690
22	8,200	1,300	1,000	2,140	1,300	1,000	580	760	400	3,720	11,550	1,600
23	10,200	1,600	760	1,960	1,150	850	580	760	670	2,700	8,710	1,780
24	9,340	1,600	1,000	2,140	1,000	850	580	1,300	670	2,500	5,930	1,600
25	8,220	1,780	1,000	1,960	1,450	850	490	1,600	760	2,140	3,670	3,500
26	4,600	1,780	850	1,780	1,960	850	400	1,300	670	4,840	3,610	3,940
27	2,900	1,300	2,320	1,600	1,450	850	400	850	670	4,160	3,560	3,500
28	2,320	1,000	11,400	1,450	1,450	760	400	760	490	2,700	3,500	3,100
29	1,780	......	15,460	1,300	3,940	670	490	760	490	2,320	3,500	2,900
30	2,320	......	10,800	1,300	2,700	850	580	850	490	2,500	1,730	2,140
31	1,780	......	11,400	......	1,960	......	580	670	......	2,500	......	2,140
Mean	3,220	1,320	2,680	5,110	2,130	1,300	784	878	484	2,280	3,650	4,400

Monthly Discharge of Genesee River at Rochester, N. Y.
[Drainage area, 2,364 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1904.					
March 2-19, 21, 23-31	27,000	2,500	13,390	5.65	6.51
April 1-11, 15-30	13,220	4,160	7,300	3.08	3.44
May	7,660	1,600	3,160	1.33	1.53
June	8,500	670	2,230	.941	1.05
July	3,100	670	1,310	.554	.639
August	1,150	400	635	.268	.308
September	850	400	523	.221	.246
October	2,500	490	986	.416	.479
November	760	490	562	.238	.265
December	13,220	490	1,570	.664	.765
1905.					
January	5,560	1,600	2,800	1.18	1.36
March	25,860	1,960	20,200	8.53	9.83
April	13,220	2,500	4,150	1.75	1.95
May	2,140	1,300	1,460	.617	.711
June	7,660	850	2,670	1.13	1.26
July	4,380	715	1,340	.566	.653
August	3,720	535	1,230	.520	.600
September	850	400	580	.245	.274
October	1,000	400	589	.249	.287
November	7,940	580	1,400	.592	.660
December	7,380	580	2,690	1.14	1.31
1906.					
January	10,200	1,150	3,220	1.36	1.57
February	1,780	760	1,320	.558	.581
March	15,460	670	2,680	1.13	1.30
April	12,900	1,300	5,110	2.16	2.41
May	4,600	1,000	2,130	.900	1.04
June	2,900	670	1,300	.550	.614
July	2,700	400	784	.331	.381
August	1,600	490	878	.371	.428
September	760	400	484	.204	.227
October	4,840	580	2,280	.963	1.10
November	11,550	1,600	3,650	1.54	1.72
December	11,630	1,600	4,400	1.86	2.14
The year	6,740	885	2,350	.994	13.56

GENESEE RIVER AT GENESEE JUNCTION, MONROE COUNTY, N. Y.

This gaging station, which is located at the West Shore Railroad bridge, was established by Geo. T. Keith, March 21, 1905. The gage is placed in a horizontal position and secured to the lower chord of the south truss at center of bridge.

Readings are taken each morning by means of a chain-and-plumb-bob gage, by G. E. Krill.

The West Shore Railroad bridge is about five and one-quarter miles south of the Elmwood Avenue bridge in Rochester. The only tributaries to the Genesee river between these points are the little Black creek on the west with a drainage area of nineteen square miles, and Red creek on the east with a drainage area of twenty-four square miles. The total difference of drainage area between this gaging station and the Elmwood Avenue gaging station is forty-three square miles.

Current-Meter Discharge Measurements of Genesee River at West Shore Railroad Bridge, Genesee Junction, N. Y.

DATE.	Gage height.	Elevation of water-surface.	Width.	Area of section.	Mean velocity.	Discharge.
			Feet.	*Sq. feet.*	*Feet per Sec.*	*Second-feet.*
October 3, 1905...	1.7	507.7	169.5	1,604	0.23	364
October 26, 1905..	2.4	508.4	170.5	1,723	0.49	344
November 27, 1905	2.1	508.1	170.0	1,672	0.38	627

Mean Daily Elevation of Water-surface of Genesee River at Genesee Junction, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	514.5	509.5	508.2	508.4	510.8	507.7	......	508.2	511.8
2	......	......	......	......	509.4	508.2	......	510.6	507.7	507.6	508.2	510.3
3	......	......	......	511.8	509.2	508.2	508.2	510.1	......	507.9	508.2	......
4	......	......	......	511.4	509.1	......	508.2	509.1	507.7	507.9	508.2	510.1
5	......	......	......	510.4	508.9	508.3	508.2	509.1	507.7	507.8	......	511.5
6	......	......	......	510.8	508.8	508.3	508.2	......	507.7	507.8	508.3	510.3
7	......	......	......	510.7	......	509.6	508.3	508.4	507.7	507.8	509.5	509.8
8	......	......	......	510.4	508.9	510.4	508.4	508.4	507.7	......	509.5	509.6
9	......	......	......	......	509.1	510.3	......	508.3	507.7	507.7	509.5	509.7
10	......	......	......	509.8	508.8	509.7	508.1	508.2	......	507.7	509.4	......
11	......	......	......	509.6	508.7	......	508.1	508.5	507.7	507.7	508.9	509.9
12	......	......	......	509.8	508.5	509.2	508.1	508.6	507.7	507.7	......	509.6
13	......	......	......	511.1	508.4	509.2	508.9	......	507.7	507.7	508.7	509.4
14	......	......	......	510.3	......	509.1	509.1	508.8	508.3	507.7	508.7	509.2
15	......	......	......	509.9	508.8	508.7	510.5	508.8	508.3	......	508.5	508.9
16	......	......	......	......	508.9	508.5	......	508.8	508.3	508.1	508.5	508.7
17	......	......	......	509.7	508.7	508.4	509.4	508.8	......	508.1	508.3	......
18	......	......	......	509.6	508.7	......	508.9	508.4	508.2	508.1	508.3	508.3
19	......	......	......	509.5	508.7	511.7	508.5	508.3	508.2	508.1	......	508.3
20	......	......	......	509.9	508.6	511.4	508.4	......	508.2	508.2	508.3	508.3
21	......	......	......	509.9	......	511.8	508.4	508.1	508.1	508.3	508.3	508.8
22	......	......	521.6	516.2	508.4	511.4	508.2	508.1	508.1	......	508.4	509.2
23	......	......	521.4	......	508.3	513.8	......	507.9	508.1	508.5	508.2	511.7
24	......	......	521.9	513.2	508.3	512.2	508.2	507.9	......	508.5	508.2	......
25	......	......	521.9	511.4	508.3	......	508.2	507.9	507.8	508.5	508.2	510.5
26	......	......	......	509.9	508.3	509.8	508.2	507.8	507.8	508.5	......	510.1
27	......	......	521.8	509.8	508.3	509.7	508.1	......	507.8	508.5	508.2	509.5
28	......	......	521.2	509.7	......	509.4	508.1	507.8	507.7	508.4	508.2	509.7
29	......	......	520.5	509.5	508.3	508.9	508.1	507.8	507.6	......	508.2	510.7
30	......	......	519.5	......	508.3	508.7	......	507.8	507.6	508.1	511.5	512.7
31	......	......	517.5	......	508.2	......	511.1	507.8	......	508.1	......	......

Elevation of zero of gage = 506.7, B. C. datum.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Genesee River at Genesee Junction, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	510.7	509.2	508.9	......	509.2	509.4	......	507.9	508.2	508.3	510.3	510.2
2	510.4	509.2	508.9	514.4	509.2	509.4	508.3	507.9	......	508.3	510.3	......
3	510.2	509.2	508.8	513.1	509.2	......	508.3	508.1	508.1	508.3	510.3	510.2
4	510.2	......	......	512.7	511.9	509.2	508.8	508.1	508.1	508.3	......	510.2
5	510.2	509.7	510.9	513.8	511.2	508.7	510.1	......	508.1	508.5	510.3	509.9
6	511.3	509.7	510.7	513.8	......	508.7	509.4	508.7	507.8	508.5	510.3	509.9
7	......	509.7	509.7	513.8	510.2	509.7	508.8	508.7	507.8	......	510.3	516.3
8	510.1	509.5	509.3	......	510.2	510.3	......	508.2	507.8	511.9	509.9	516.9
9	509.8	509.5	509.2	512.1	509.7	510.3	508.4	508.4	......	510.0	509.2	......
10	509.6	509.5	509.2	514.8	509.7	......	508.4	508.7	507.9	509.9	509.2	513.4
11	509.3	......	......	515.5	509.6	508.9	508.1	508.6	507.9	510.4	......	512.3
12	509.3	508.3	508.7	514.8	509.6	508.9	508.1	......	507.7	510.4	509.2	511.8
13	509.3	508.3	508.7	513.4	......	508.9	508.1	508.5	507.7	510.2	509.2	511.8
14	......	508.3	508.5	512.4	509.4	508.4	508.1	508.5	507.7	......	509.7	511.2
15	508.9	508.7	508.5	......	509.4	508.4	......	508.3	507.7	508.9	510.3	511.2
16	509.2	508.8	508.4	512.2	509.4	508.4	507.9	508.2	......	508.9	510.7	......
17	510.3	508.8	508.4	511.9	509.3	......	507.9	508.2	508.4	508.9	510.7	512.7
18	510.3	......	......	510.8	509.3	509.1	507.9	508.2	508.4	508.9	......	512.7
19	509.8	508.3	508.4	510.8	510.1	509.1	507.8	......	507.9	508.9	513.4	511.4
20	509.8	508.5	508.3	510.7	......	508.9	507.8	508.1	507.9	509.2	513.9	510.4
21	......	508.6	508.3	510.3	509.2	508.9	507.8	508.4	507.9	......	513.3	510.2
22	514.2	508.9	508.3	......	509.2	508.4	......	509.7	507.9	510.2	515.5	510.2
23	515.2	509.5	508.3	509.6	509.2	508.4	507.9	509.7	......	510.2	515.7	......
24	514.7	509.9	508.3	509.6	509.2	......	507.9	509.4	508.3	510.2	514.5	510.2
25	514.2	......	......	509.4	509.7	508.4	507.8	509.2	508.3	510.2	......	510.2
26	511.6	509.4	508.8	509.4	509.7	508.4	507.8	......	508.3	511.4	511.9	510.2
27	511.2	509.2	510.1	509.2	......	508.4	507.7	508.7	507.9	511.4	511.7	510.2
28	......	509.1	515.1	509.2	509.2	508.4	507.7	508.7	507.9	......	510.9	509.8
29	509.9	......	517.6	......	510.7	508.4	......	508.4	507.9	509.9	510.4	509.8
30	509.7	......	515.5	509.2	510.4	508.4	507.9	508.4	......	509.9	510.2	......
31	509.5	......	515.5	......	509.8	......	507.9	508.2	......	510.3	......	......

GENESEE RIVER AND CANASERAGA CREEK NEAR MOUNT MORRIS, N. Y.

This station was established by Robert E. Horton, May 22, 1903. It is located at the highway bridge near Mount Morris, a short distance below the inflow of Canaserega creek.[a]

About 300 feet above the bridge the channel bends abruptly, but it is straight for several hundred feet below the gage. The bed of the stream is of clay. During flood stages both banks are overflowed and the discharge cannot be determined at this station.

Discharge measurements are made from a footbridge erected on the outriggers of the down-stream side of the highway bridge, which consists of two spans of 174.3 and 31.7 feet, respectively. The initial point for soundings is the top of the face of the left abutment, down-stream side. Measurements of Canaseraga creek are also made from a bench-mark station near the mouth of the stream.

A standard chain gage, which is read twice daily by J. T.

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[a] The location of the gaging station and the course of the river from Jones Bridge to its outlet into Lake Ontario near Rochester is shown on the Caledonia, Honeoye, and Rochester topographic atlas sheets of the United States Geological Survey.

Trewer, is secured to the truss uprights near the center of the main bridge span on the up-stream side. The length of the chain is 15.50 feet. The bench mark is the corner of the wing wall, left abutment, up-stream side; elevation, 30.36 feet above datum plane of gage. This station was discontinued May 2, 1906.

Mean Daily Gage Height, in Feet, of Genesee River near Mount Morris, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	8.2	6.4	6.65	13.85	5.75	......	......	......	......	......	......	......
2	7.3	5.8	6.85	11.2	5.5	......	......	......	......	......	......	......
3	6.8	7.7	6.3	10.3	......	......	......	......	......	......	......	......
4	7.2	7.5	8.25	10.5	......	......	......	......	......	......	......	......
5	9.7	7.35	8.0	13.4	......	......	......	......	......	......	......	......
6	7.7	7.1	6.1	12.35	......	......	......	......	......	......	......	......
7	6.3	6.65	5.9	11.45	......	......	......	......	......	......	......	......
8	6.1	6.5	5.7	9.95	......	......	......	......	......	......	......	......
9	7.2	6.4	5.5	9.55	......	......	......	......	......	......	......	......
10	9.0	6.3	5.5	13.2	......	......	......	......	......	......	......	......
11	8.8	6.05	5.25	14.1	......	......	......	......	......	......	......	......
12	8.9	5.75	5.25	11.7	......	......	......	......	......	......	......	......
13	8.3	5.55	5.25	10.35	......	......	......	......	......	......	......	......
14	7.7	5.95	5.05	9.35	......	......	......	......	......	......	......	......
15	7.55	6.0	5.0	10.55	......	......	......	......	......	......	......	......
16	7.05	5.8	5.1	11.1	......	......	......	......	......	......	......	......
17	8.95	5.75	4.95	9.45	......	......	......	......	......	......	......	......
18	7.95	5.8	4.8	8.4	......	......	......	......	......	......	......	......
19	7.2	5.6	4.8	7.65	......	......	......	......	......	......	......	......
20	6.55	5.5	5.9	7.2	......	......	......	......	......	......	......	......
21	12.05	5.6	5.15	6.8	......	......	......	......	......	......	......	......
22	16.25	6.5	5.0	6.6	......	......	......	......	......	......	......	......
23	15.45	6.55	5.0	6.8	......	......	......	......	......	......	......	......
24	15.3	6.1	4.7	6.5	......	......	......	......	......	......	......	......
25	10.5	5.85	4.85	6.25	......	......	......	......	......	......	......	......
26	8.35	6.05	5.05	5.95	......	......	......	......	......	......	......	......
27	7.45	5.65	9.1	5.75	......	......	......	......	......	......	......	......
28	7.0	7.05	21.43	5.5	......	......	......	......	......	......	......	......
29	6.7	......	14.7	5.5	......	......	......	......	......	......	......	......
30	6.3	......	13.5	5.65	......	......	......	......	......	......	......	......
31	6.15	......	18.45	......	......	......	......	......	......	......	......	......

River frozen over from February 1 to March 20 approximately. During frozen period gage readings are to water-surface through hole cut in ice. Ice averaged from 0.2 to 0.6 foot thick at gage and from 0.3 to 0.8 foot thick 200 feet below. This station has backwater conditions during the spring floods; also, considerable water flows around the left hand end of the bridge above gage height 18.0 feet.

Current Meter Discharge Measurements of Genesee River near Mount Morris, N. Y.

DATE.	Hydrographer.	Width.	Area of section.	Gage height.	Discharge.
1906.		*Feet.*	*Square feet.*	*Feet.*	*Second-feet.*
Feb. 12*a*	C. C. Covert	118	298	5.75	452
Feb. 13*a*	C. C. Covert	118	290	5.78	479
Feb. 16*a*	C. C. Covert	127	373	6.00	525
March 29	C. C. Covert	171	1,640	13.9	5,420
March 30	C. C. Covert	166	1,500	13.1	5,780
March 31	C. C. Covert	193	2,660	19.05	10,780
March 31	C. C. Covert	193	2,630	18.85	10,200
April 1	C. C. Covert	185	1,750	14.33	5,920
April 2	C. C. Covert	163	1,210	11.60	4,360
April 3	C. C. Covert	161	1,050	10.50	3,930
April 4	C. C. Covert	161	1,120	10.85	4,460
April 14	C. C. Covert	153	864	9.38	3,080
April 21	C. C. Covert	129	502	6.89	1,660
April 22	C. C. Covert	127	460	6.60	1,520
April 23	C. C. Covert	127	504	6.90	1,740
Sept. 15	C. C. Covert	70	191	4.15	238

a Measurements made under ice cover; average thickness of ice, 0.49, 0.41, 0.68 foot, respectively. Gage height to bottom of ice, 5.36, 5.47, 5.42 feet, respectively.

Rating Table for Genesee River near Mount Morris, N. Y., from January 1, 1906, to April 30, 1906.

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
Feet.	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*
4.70	490	6.10	1,215	7.50	2,030	9.80	3,560
4.80	535	6.20	1,270	7.60	2,090	10.00	3,700
4.90	580	6.30	1,325	7.70	2,155	10.20	3,840
5.00	625	6.40	1,380	7.80	2,220	10.40	3,980
5.10	675	6.50	1,435	7.90	2,285	10.60	4,120
5.20	725	6.60	1,490	8.00	2,350	10.80	4,270
5.30	775	6.70	1,550	8.20	2,480	11.00	4,420
5.40	830	6.80	1,610	8.40	2,610	12.00	5,170
5.50	885	6.90	1,670	8.60	2,740	13.00	5,960
5.60	940	7.00	1,730	8.80	2,870	14.00	6,760
5.70	995	7.10	1,790	9.00	3,000	15.00	7,560
5.80	1,050	7.20	1,850	9.20	3,140		
5.90	1,105	7.30	1,910	9.40	3,280		
6.00	1,160	7.40	1,970	9.60	3,420		

The above table is applicable only for open-channel conditions. It is based upon discharge measurements made during 1906. It is fairly well defined. Above gage height 12.2 feet the rating curve is assumed to be a tangent by the U. S. Geological Survey, the difference being 80 per tenth.

Mean Daily Discharge, Second-Feet, of Genesee River near Mount Morris, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	2,480			6,640								
2	1,910			4,570								
3	1,610			3,910								
4	1,850			4,050								
5	3,490			6,280								
6	2,160			5,440								
7	1,320			4,760								
8	1,220			3,660								
9	1,850			3,380								
10	3,000			6,120								
11	2,870			6,840								
12	2,940			4,940								
13	2,540			3,940								
14	2,160			3,240								
15	2,060			4,080								
16	1,760			4,500								
17	2,970			3,320								
18	2,320			2,610								
19	1,850			2,120								
20	1,460			1,850								
21	5,210		700	1,610								
22	8,560		625	1,490								
23	7,920		625	1,610								
24	7,800		490	1,440								
25	4,050		558	1,300								
26	2,580		650	1,130								
27	2,000		3,070	1,020								
28	1,730		a11,000	885								
29	1,550		7,320	885								
30	1,320		6,360	968								
31	1,240		10,300									

a Backwater assumed March 28; discharge estimated.

Monthly Discharge of Genesee River near Mount Morris, N. Y.
[Drainage area, 1,070 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1906.					
January	8,560	1,220	2,830	2.64	3.04
April	6,840	885	3,290	3.07	3.42

Current Meter Discharge Measurements of Canaseraga Creek near Mount Morris, N. Y.

DATE.	Hydrographer.	Width.	Area of section.	Gage height.	Discharge.
1906.		*Feet.*	*Square feet.*	*Feet.*	*Second-feet.*
March 29	C. C. Covert	84	500	9.22	1,880
March 30	C. C. Covert	84	456	8.90	1,620
March 31[a]	C. C. Covert	94	900	13.55	1,670
April 2	C. C. Covert	81	368	7.85	1,430
April 3	C. C. Covert	75	310	7.00	1,150
April 21	C. C. Covert	66	142	4.45	478

[a] Backwater from Genesee river.

HONEOYE CREEK AT EAST RUSH, MONROE COUNTY, N. Y.

The gaging station was established by Robert E. Horton on Honeoye creek at the grist-mill in the village of East Rush, February 13, 1903, and was discontinued May 1, 1906. The record includes the flow over the dam, which is of timber, having a crest varying somewhat in level, 150.15 feet in length; also the discharge through two Leffel standard turbines, one forty-eight inches, the other thirty-five inches in diameter. A record is kept of the head on the turbines and the number of hours each runs per day and the average gate opening. During 1905 the dam was repaired and the discharge subsequent to September 30, 1905, has been calculated from a profile and survey made after these repairs were completed.

Honeoye creek is the outlet of Honeoye lake, which forms one of a group of narrow, parallel lakes similar to the Finger lakes of the Seneca river basin and located to the west of the latter. Honeoye creek is joined four miles below its source by the combined outlet of Hemlock and Canadice lakes, which enters Genesee river near Rochester Junction. The lakes of this group have areas and elevations as indicated below.*

LOCATION.	Elevation.	Water-surface area.	Drainage area.	Per cent, water-surface.
		Square miles.	*Square miles.*	
Hemlock lake	896	2.8	46.8	.0612
Canadice lake	1,092	0.7	12.6	.0557
Honeoye lake	800	2.5	39.6	.0641

Honeoye creek enters Genesee river at Genesee Valley Junction. The entire drainage area is approximately rectangular, having a length of thirty miles; average width, 9.5 miles. The fall of 280 feet in the course of the stream has been largely utilized by the construction of dams.

The lakes, which serve as natural reservoirs, have inlets draining considerable areas at their uppermost ends. The slopes adjacent to the lakes themselves are narrow and steep, and are drained by gulleys and torrential brooks. The area below the lakes is rolling, the soil, rich and extensively cultivated. The stream tributaries are not numerous, but ramify in such manner as to give good drainage of all portions of the area.

The diversion from Hemlock lake by the city of Rochester is to be added to the measured run-off at East Rush, to obtain the total yield of the drainage basin. The average diversion rate is about twenty-two cubic feet per second.

Drainage Areas of Honeoye Creek.

LOCALITY.	AREA IN SQUARE MILES.	
	Place to place.	Total.
Hemlock lake, above outlet	46.8	....
Hemlock lake outlet to Canadice lake outlet	.1	46.9
Canadice lake, above outlet	12.6	....
Canadice lake outlet to Hemlock lake outlet	18.9	31.5
Junction of Hemlock and Canadice lake outlets	....	78.4
Hemlock outlet, from junction to Honeoye creek	15.6	94.0
Honeoye lake, above outlet	39.6	....
Honeoye creek, from lake outlet to junction of Hemlock outlet	31.7	71.3
Honeoye and Hemlock outlets, at junction	....	165.0
Honeoye creek junction to Honeoye Falls	44.0	209.0
Honeoye Falls to East Rush	50.0	260.0
Honeoye creek, East Rush to mouth	28.0	288.0

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* The drainage of Honeoye creek is shown on the Honeoye, Canandaigua, Naples and Wayland quadrangles, U. S. Geological Survey Topographic Maps, from which the areas have been taken, with the exception of those from Hemlock and Canadice lakes, which are from surveys of Rochester water-works.

Mean Daily Discharge, Second-feet, of Honeoye Creek at Dam, East Rush, N.Y.

DAY.	Jan.	Feb.	Mar.	Apr.
1906.				
1	84	84	60	527
2	60	42	60	445
3	52	42	148	329
4	123	43	194	282
5	141	42	172	553
6	111	37	123	542
7	77	33	84	505
8	44	42	99	444
9	44	40	70	541
10	31	43	70	1,176
11	29	25	77	764
12	61	38	52	574
13	88	39	52	497
14	43	70	52	411
15	54	70	52	366
16	60	70	52	345
17	60	70	60	305
18	60	77	77	301
19	84	70	44	305
20	104	70	53	229
21	169	172	74	231
22	246	196	94	219
23	321	104	70	214
24	132	148	60	179
25	84	169	25	149
26	70	172	70	149
27	70	84	1,107	125
28	77	60	1,073	131
29	60	......	512	121
30	70	......	510	131
31	84	......	1,023	......

From January 1 to March 26, discharge approximate; ice conditions obstruct flow over crest of dam.

Monthly Discharge of Honeoye Creek at Dam, East Rush, N. Y.
[Drainage area, 238 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1906.					
January	321	29	90.0	.378	.439
February	196	25	76.8	.323	.336
March	1,107	25	202.0	.848	.979
April	1,176	121	370.0	1.55	1.73

NOTE.—From January 1 to March 26, discharge is approximate; ice conditions obstruct flow over crest of dam.

CANADICE LAKE OUTLET NEAR HEMLOCK, N. Y.

Canadice lake is tributary to Genesee river through Hemlock lake outlet and Honeoye creek. The area drained by the lake forms an irregular rectangle, the lake lying somewhat to the left of the longitudinal axis and the greater portion of the drainage being on the eastern slope. The western slope is narrow and precipitous. Bald Hill rises from an altitude of 1,090 feet at the lake to 1,800 feet at the summit and has its axis parallel to the lake at an average distance of three-fourths of a mile from it. The lake has a water-surface area of 0.7 square mile and drains a total area of 12.6 square miles, 5.6 per cent of which is lake surface.

A weir was constructed at the outlet at the foot of the lake by the city engineer's department of Rochester, N. Y., in February, 1903. The entire yield of the drainage basin passes this weir.

A standard thin-edged weir, with a five-foot crest and two end contractions, is so arranged with needle-timbers at the ends that during high water the length may be increased to 14.96 feet with no end contractions. The weir crest stands three feet above the stream channel and is never submerged by backwater. There are two additional rectangular gates each one foot square, with three complete contractions and a fourth partial contraction at the bottom. The outflow from the lake above the weir is controlled by gates.

A reading of the depth of the weir is taken each morning, and also for each change of the gates, the depth being read to hundredths and corrections being made for velocity of approach for the larger discharges. The discharge is calculated by the Francis formula. The record has been furnished by E. A. Fisher, city engineer, and John F. Skinner, principal assistant city engineer, of Rochester, N. Y.

Monthly Discharge of Canadice Lake Outlet at Hemlock, N. Y.
[Drainage area, 12.6 square miles.]

MONTH.	Mean discharge in second-feet.	RUN-OFF.	
		Second-feet per square mile.	Depth in inches.
1906.			
January	9.52	.755	.866
February	9.33	.740	.770
March	11.1	.880	1.01
April	27.7	2.20	2.45
May	13.1	1.04	1.20
June	10.9	.864	.954
July	8.74	.693	.793
August	8.14	.646	.747
September	6.54	.519	.580
October	6.97	.552	.632
November	27.1	2.15	2.40
December	33.0	2.62	3.02
The year	14.3	1.14	1.29

OSWEGO RIVER BASIN.

DESCRIPTION OF BASIN.

Oswego river is formed by the union of Seneca and Oneida rivers about twelve miles northwest of Syracuse, N. Y., whence its course is northwestward to Oswego, where it enters Lake Ontario. The length of the river, from the junction to the mouth, is about 20.5 miles, and the drainage basin along this distance is a narrow strip of country, moderately rolling. Above the junction of Seneca and Oneida rivers the basin spreads out, attaining an extreme width east and west of about 100 miles and north and south of from seventy to eighty miles. There is, on the whole, a gradual rise from the low, level lands which border Lake Ontario to the north-south ridges which separate the various lakes south of Seneca river and which farther south become merged with the still more elevated country lying along the southern boundary of the Lake Ontario watershed.

The most remarkable feature of the drainage basin is the chain of lakes stretching across its southern border. From west to east the principal lakes are, in order, Canandaigua, Keuka, Seneca, Cayuga, Owasco, Skaneateles and Oneida. These seven lakes include a water-surface of, approximately, 280 square miles, increased by four smaller lakes — Cross, Onondaga, Otisco and Cazenovia — to about 295 square miles. The larger of the lakes, Oneida, Cayuga and Seneca, are used for steam-towing navigation, having connection with the Erie and Oswego canals. Cayuga and Seneca lakes are noted for their depth and for the abrupt slopes of their beds. The influence of the lakes on Oswego river is of the utmost importance in contributing to the steadiness of its flow.

A fall of 100 feet in the course of the main river is largely utilized by seven dams, which also partly canalize the stream. The intervening stretches are covered by the Oswego canal, which draws its water-supply from the river.

Drainage Areas Tributary to Oneida Lake and Oneida River.
(From U. S. G. S. Topographic Maps.)

NAME OF STREAM.	AREA IN SQUARE MILES.		
	Place to place.	Sub-total.	Total.
East branch, Fish creek.			
Head to junction with Alder creek	45.4		
Alder creek	25.7	71.1	
Junction with Alder creek to junction with Point Rock creek	36.7	107.8	
Point Rock creek	19.9	127.7	
Junction with Point Rock creek to junction with Fall brook	4.5	132.2	
Fall brook	13.5	145.7	
Junction with Fall brook to junction with Florence creek	1.3	147.0	
Florence creek	20.4	167.4	
Junction with Florence creek to junction with Furnace creek (Taberg)	1.7	169.1	
Furnace creek	14.4	183.5	
Taberg to junction with West branch, Fish creek	3.6	187.1	
West branch, Fish creek.			
Head to lower dam, Williamston	25.8	25.8	
Williamston to West Camden	27.1	52.9	
West Camden to junction with Mad river, Camden	14.2	67.1	
Mad river	45.4	112.5	
Camden to junction with Little river	21.6	134.1	
Little river	52.1	186.2	
Little river to McConnellsville	4.0	190.2	
McConnellsville to junction with East branch, Fish creek	11.9	202.1	
Junction of East and West branches, Fish creek, to junction with Wood creek	27.8	389.2	417.0
Wood creek.			
Above Erie canal, Rome	10.2	10.2	
Erie canal, Rome, to junction with Mud creek	2.0	12.2	
Mud creek	20.0	32.2	
Junction with Mud creek to junction with Canada creek	6.4	38.6	
Canada creek	31.0	69.6	
Junction with Canada creek to junction with Stoney creek	1.2	70.8	
Stoney creek	20.4	91.2	
Junction with Stoney creek to junction with Fish creek	31.4	122.6	122.6
Oneida creek.			
Head to Peterboro	13.4	13.4	
Peterboro to falls	6.7	20.1	
Falls to Munnsville	15.6	35.7	
Munnsville to Kenwood	27.3	63.0	
Kenwood to Oneida Castle (State dam)	10.8	73.8	
Oneida Castle to Sconondoa creek, Oneida	2.1	75.9	
Sconondoa creek	34.3	110.2	
Sconondoa creek to Durhamville	4.8	115.0	
Durhamville to mouth	28.0	143.0	143.0
Canaseraga creek.			
Head to Perryville	5.7		
Perryville to Erie canal	9.0	14.7	
Erie canal to Douglas ditch	8.1	22.8	
Cowassalon creek.			
Head to Clockville creek	17.2	17.2	
Clockville creek	11.1	28.3	
Clockville creek to Erie canal	5.5	33.8	
Erie canal to mouth of Douglas ditch	39.3	73.1	
Junction with Douglas ditch to Lakeport	3.2	95.9	99.1
Chittenango creek.			
Erieville reservoir, water-surface	.45		
Erieville reservoir, land drainage	3.30	3.75	
Erieville reservoir to Cazenovia lake	30.5	34.25	
Cazenovia lake, water-surface	1.7	35.95	
Cazenovia lake, land drainage	8.7	44.65	
Cazenovia lake to Chittenango falls	14.4	59.05	
Chittenango falls to State dam, Chittenango	17.9	76.95	
State dam to junction with Butternut creek	28.1	105.05	
Butternut creek.			
Head to Jamesville reservoir	47.4	47.4	
Jamesville reservoir to State dam	5.7	53.1	
State dam to junction with Limestone creek	19.2	72.3	

Drainage Areas Tributary to Oneida Lake and Oneida River—(Concluded).

NAME OF STREAM.	AREA IN SQUARE MILES.		
	Place to place.	Sub-total.	Total.
Limestone creek.			
De Ruyter reservoir, water-surface	1.0		
De Ruyter reservoir, land drainage	17.8	18.8	
De Ruyter reservoir to junction with East branch	4.3	23.1	
East, or New Woodstock branch	12.6	35.7	
Junction with East branch to junction with West rbranch	34.5	70.2	
West branch, Limestone creek (State dam)	24.8	95.0	
State dam to junction with Butternut creek	18.2	113.2	185.5
Junction with Limestone creek to Chittenango creek	1.1	186.6	291.65
Chittenango creek, junction with Butternut creek to Bridgeport	30.3	321.95	
Chittenango creek, Bridgeport to Oneida lake	4.3	326.25	326.25
Oneida lake drainage through main streams	....	1,107.95	
Big Bay creek	26.3		
Little Bay creek	11.5		
Scriba creek	45.4		
Coast drainage, north shore Oneida lake	54.5		
Coast drainage, south shore Oneida lake	28.9		
		166.6	1,274.55
Water-surface, Oneida lake	78		
Land drainage, Oneida lake	1,274.55	1,352.55	
Oneida river.			
Brewerton to Caughdenoy creek	4.8	4.8	1,357.9
Caughdenoy creek	19.3	24.1	1,376.7
Caughdenoy creek to Oak Orchard	25.1	49.2	1,401.8
Mud creek	34.7	83.9	1,436.5
Oak Orchard to Potts creek	5.0	88.9	1,441.5
Potts creek	22.9	111.8	1,464.4
Six Mile creek	24.0	135.8	1,488.4
Potts creek to Three River Point	4.5	140.3	1,492.9

Drainage Areas Tributary to Seneca River.
(From U. S. G. S. Topographic Maps.)

NAME OF STREAM.	AREA IN SQUARE MILES.			
	Place to place.	Sub-total.	Branch total.	General total.
Mud creek.				
Head to and including Schaffer creek	51.31	....	....	....
Junction with Schaffer creek to junction with Sucker brook, Victor (formerly Ganargua creek)	25.70	77.01	....	....
Sucker brook	20.15	97.16	....	....
Ganargua creek.				
Victor to Erie canal, Macedon	26.20	123.36	....	....
Macedon to junction with East Red creek, East Palmyra	55.0	178.36	....	....
East Red creek	59.5	237.86	....	....
East Red creek to Canandaigua outlet	61.37	299.23	299.23	....
Canandaigua lake.				
Naples creek	48.55	171.97	....	....
West river	42.08			
Other land drainage	81.34			
Water-surface	16.40	....	188.37	....
Canandaigua outlet.				
Foot of lake to and including Black brook	50.37	238.74	....	....
Black brook to Flint creek, at Phelps	54.34	293.08	293.08	....
Flint creek.				
Above Patten	31.59	....	....	....
Patten to Gorham, not including Gorham swamp	24.84	56.43	....	....
Gorham swamp	5.46	61.89	....	....
Gorham to Orleans	25.57	87.46	....	....

Drainage Areas Tributary to Seneca River—(Continued).
(From U. S. G. S. Topographic Maps.)

NAME OF STREAM.	AREA IN SQUARE MILES.			
	Place to place.	Sub-total.	Branch total.	General total.
Orleans to junction with Canandaigua outlet at Phelps	15.21	102.67	395.75	....
Phelps to junction with Ganargua creek at Lyons, forming Clyde river.	48.36	444.11	743.34	....
Clyde river.				
Lyons to junction with Seneca river, foot of Cayuga lake	141.11	884.45	....	884.45
Seneca river.				
Seneca lake.				
Keuka lake.				
Land drainage to outlet	160.96	....	....	....
Water surface	17.51	178.47	....	....
Keuka outlet to Seneca lake	24.80	203.27	640.93	
Catharine creek.				
Above Montour Falls	66.46	....		
Montour Falls to Seneca lake	29.91	96.37		....
Watkins Glen creek	23.53	23.53		
Direct lake drainage	317.76	317.76		
Water surface	67.16	....	708.09	....
Seneca river, foot of Seneca lake to Waterloo	40.90	....	748.99	....
Seneca river, Waterloo to Seneca Falls	28.55	....	777.54	....
Seneca river, Seneca Falls to Mud lock, foot of Cayuga lake	7.52	....	785.06	....
Cayuga lake.				
Cascadilla creek	14.38	....	....	....
Six Mile creek	59.05	....	....	....
Buttermilk creek	29.16	....	....	....
Cayuga inlet	67.02	....	....	....
Salmon creek	91.13	....	....	....
Fall creek.				
Above Freeville	58.68	....	....	....
Virgil creek	26.00	84.68	....	....
Freeville to Cornell dam	30.62	115.20	....	....
Cornell dam to Cayuga lake	1.56	116.76	....	....
Taghanic creek.				
Above Halseyville	56.96	....	....	....
Halseyville to Taghanic falls	10.40	67.36	....	....
Taghanic falls to Cayuga lake	.39	67.75	....	....
Other Cayuga lake drainage	275.04	720.29	....	....
Cayuga lake, water-surface	66.31	786.60	1,571.60	....
Seneca river, Cayuga lake, to junction with Clyde river	15.42	....	1,587.02	2,471.47
Seneca river, junction with Clyde river to junction with Owasco outlet	146.23	....	....	2,617.70
Owasco lake.				
Owasco inlet, above Moravia	74.33	....	....	....
Moravia to Owasco lake	42.92	117.25	....	....
Direct drainage to lake	76.24	193.49	....	....
Foot of lake to State dam	.98	194.47	....	....
Water-surface	10.40	204.87	....	....
Owasco outlet to junction with Seneca river	16.73	221.66	....	2,839.30
Seneca river, junction with Owasco outlet to junction with Skaneateles outlet	98.70	....	....	2,938.00
Skaneateles lake.				
Land drainage to foot	58.41	....	....	....
Water surface	14.13	72.54	....	....
Foot of lake to Willow Glen	1.84	74.38	....	....
Willow Glen to Seneca river	16.69	91.07	....	3,029.07
Seneca river, Skaneateles outlet to Carpenter brook	25.50	....	....	3,054.57
Carpenter brook	18.70	....	....	3,073.27
Carpenter brook to Baldwinsville	48.10	....	....	3,121.37
Baldwinsville to Onondaga outlet	17.80	....	....	3,139.17
Onondaga lake.				
Otisco lake, land drainage to foot	41.40	....	....	....
Otisco lake, water surface	3.30	44.70	....	....
Nine Mile creek (Otisco outlet) to Onondaga lake	74.0	118.70	....	....
Onondaga creek.				
Above junction with West brook	40.6	....	....	....

Drainage Areas Tributary to Seneca River—(Concluded).

NAME OF STREAM.	AREA IN SQUARE MILES.			
	Place to place.	Sub-total.	Branch total.	General total.
Junction with West Brook to inflow to Onondaga lake	65.3	105.9	....	....
Other land drainage to Onondaga lake	59.1	283.7	....	....
Onondaga lake, water-surface	4.7	288.4	....	....
Onondaga lake, outlet to Seneca river	3.0	291.4	....	3,430.57
Seneca river, Onondaga outlet to Belgium	10.12	....	....	3,440.69
Seneca river, Belgium to Three River P't.	4.4	....	....	3,445.09

Oswego River Drainage Areas.

NAME OF STREAM.	AREA IN SQUARE MILES.		
	Place to place.	Total from Three River Point.	Total drainage basin.
Oneida river, above Three River Point	....	....	1,493
Seneca river, above Three River Point	....	....	3,445
Oswego river at Three River Point	....	....	4,938
Three River Point to Phoenix	2.32	2.32	4,940.32
Phoenix to Hinmansville	17.58	19.90	4,957.90
Hinmansville to Ox creek	17.05	37.15	4,975.15
Ox creek	33.68	70.83	5,008.83
Ox creek to upper dam, Fulton	9.15	79.98	5,016.98
Fulton to Neatawanta creek	9.15	89.13	5,027.13
Neatawanta creek	21.92	111.05	5,049.05
Neatawanta creek to Black creek	1.01	112.06	5,050.06
Black creek	37.93	149.99	5,087.99
Black creek to Battle Island	.92	150.91	5,088.91
Battle Island to Minetto	2.11	153.02	5,091.02
Minetto to High dam	4 87	157.89	5,095.89
High dam to Oswego dam	1.22	159.11	5,097.11
Oswego dam to Lake Ontario	1.21	160.32	5,098.32

ELEVATION OF WATER-SURFACE OF OSWEGO RIVER.

The drainage directly tributary to Oswego river is 160 square miles. This area comprises chiefly moderately-rolling, cultivated upland, having a good depth of soil overlying the rock, which, as a rule, is visible only in the bed of the stream. A portion of the area is drained through lakes and marshes. The run-off from the direct drainage to Oswego river is moderate and the regimen differs but little from that resulting from the inflow of the two main tributaries — the Oneida and Seneca.

Gages for Determining Elevation of Water-surface on Oswego River.

LOCATION.	DISTANCE IN MILES.*		Usual time of reading gage.	Present type of gage.
	Station to station.	From curved dam, Oswego.		
Above Oswego curved dam..	0	0	8 a. m.....	Board with coppered staples.
Below High dam	1.1	1.1	8 a. m....	Painted board scale.
Above High dam	0.1	1.2	8 a. m....	Reference point.
Below Minetto dam........	2.3	3.5	6:30 a. m..	Chain and plumb-bob.
Above Minetto dam........	.1	3.6	6:30 a. m..	Chain and plumb-bob.
Below Braddock dam†......	3.2	6.8	9 a. m....	Chain and plumb-bob.
Above Braddock dam.......	.0	6.8	9 a. m....	Board with coppered staples.
Mouth of Waterhouse creek..	2.3	9.1	9 a. m....	Reference point.
Manhattan Villa...........	.7	9.8	9 a. m....	Chain and plumb-bob.
Above lower Fulton dam....	.3	10.1	9 a. m....	Painted board.
Above Oswego Falls dam....	.8	10.9	10 a. m....	Reference point.
Mouth of Ox creek.........	3.9	14.8	11 a. m....	Board with coppered staples.
Below Horseshoe dam......	1.0	15.8	1 p. m....	Chain and plumb-bob.
Above Horseshoe dam......	.2	16.0	1 p. m....	Chain and plumb-bob.
Hinmansville.............	.9	16.9	1 p. m....	Chain and plumb-bob.
Below Phoenix dam........	3.0	19.8	Noon......	Board with coppered staples.
Above Phoenix dam........	0.1	20.0	Noon......	Board with coppered staples.

* Measured along course of stream on U. S. G. S. topographic map.
† Called also Battle Island dam.

The following tables show the mean daily elevation of water-surface at the different gages maintained along the Oswego river by this Department:

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River above Curved Dam, Oswego, N. Y.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	......	268.9	267.7	267.9	267.6	267.7	268.2	267.4
2	......	......	......	......	270.4	268.8	267.7	267.9	267.6	......	268.2	267.4
3	......	......	......	......	270.3	268.7	......	267.9	267.8	267.8	268.2	267.4
4	......	......	......	......	270.2	268.7	267.7	267.9	......	267 8	268 2	......
5	......	......	......	......	270.2	......	267.7	267.9	267.5	267.7	268.2	267.4
6	......	......	......	......	270.1	268 7	267.7	267.8	267.6	267.7	......	267 8
7	......	......	......	271.2	270.0	268.6	267.6	......	267.6	267.6	268.2	267.4
8	......	......	......	271.1	......	268.6	267.6	267.9	267.6	267.7	268.2	267.3
9	......	......	......	271.1	269.9	268.5	267.6	267.8	267.5	......	268.2	267.2
10	......	......	......	271.1	269.8	268.5	......	267.8	267.7	267.7	268 1	267.5
11	......	......	......	271.1	269.7	268.5	267.6	267.7	......	267.7	268.1	......
12	......	......	......	271.1	269.6	......	267.6	267.8	267.7	267.7	268.2	267.6
13	......	......	......	271.0	269.5	268.4	267.5	267.7	267.7	267.9	......	267.6
14	......	......	......	271 0	269.4	268.4	267.5	......	267.6	267.9	268.1	267.6
15	......	......	......	270.9	......	268.3	267.6	267.8	267.5	267.9	268 2	267.5
16	......	......	......	270.9	269 4	268.3	267.5	267 8	267.7	......	268.1	267.4
17	......	......	......	......	269.3	268.3	......	267.6	267.8	268.0	268.0	267.5
18	......	......	......	270.8	269.2	268.2	267.6	267.7	......	267.9	268 1	......
19	......	......	......	270.8	269 2	......	267.5	267.6	267.7	267.9	268.0	267.2
20	......	......	......	270.7	269.2	268.2	267.4	267.6	267.7	267.9	......	267.1
21	......	......	......	270.6	269.3	268.1	267.3	......	267.6	268.0	267.9	267.1
22	......	......	......	270.6	......	268.1	267.3	267.9	267.7	268.1	267.8	267.2
23	......	......	......	270.5	269.3	268.0	267.3	267.8	267.6	......	267.6	267.2
24	......	......	......	......	269.3	268.0	......	268.0	267.6	268.3	267.6	267.2
25	......	......	......	270.5	269.2	268.0	267.4	267.7	267.1	268.3	267.6	......
26	......	......	......	270.4	269.2	......	267.2	267.7	268.1	268.2	267.6	267.5
27	......	......	......	270.4	269 1	267.9	267.3	267.8	267.7	268.2	......	267.7
28	......	......	......	270 4	269.1	267.8	267.2	......	267.7	268.2	267.8	268.6
29	......	......	......	270.5	......	267.8	267.2	267.8	267.8	268.2	267.5	268.4
30	......	......	......	270.4	269 1	267.8	267.2	267.7	267.7	......	267.5	268.4
31	......	......	......	......	268.9	......	......	267.7	......	268.3	......	268.4

* Gage defective.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River above Curved Dam, Oswego, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	268.4	268.0	271.1	269.5	267.5	268.8	267.6	268.4	......	268.5	268.6
2	268.7	268.3	268.0	......	269.0	267.5	......	267.6	268.4	268.0	268.5	268.7
3	268.4	268.3	268.0	271.1	268.9	267.5	268.8	267.6	......	268.0	268.5	......
4	267.7	268.4	268.0	271.0	268.9	......	268.7	267.5	268.6	268.1	268.5	269.1
5	268.2	......	......	271.0	268.9	267.4	268.7	268.2	268.7	268.2	......	269.2
6	268.2	268.3	268.0	271.0	268.8	267.4	268.6	......	268.8	268.1	268.9	269.2
7	268.3	268.2	267.9	271.0	......	267.4	268.5	268.2	268.7	268.1	268.7	269.2
8	......	268.2	267.9	270.9	268.8	267.5	268.4	268.1	268.6	......	268.7	269.2
9	268.4	268.2	267.9	......	268.7	267.6	......	268.0	268.4	268.1	268.7	269.2
10	268.4	268.2	267.9	270.8	268.6	267.6	268.3	268.0	......	268.0	268.8	......
11	268.4	268.1	267.9	270.7	268.6	......	268.2	267.9	268.4	268.1	268.8	269.1
12	268.5	......	......	270.7	268.5	267.7	268.1	267.9	268.4	268.4	......	269.1
13	268.6	268.4	267.9	270.6	268.4	267.7	268.1	......	268.3	268.6	268.8	269.0
14	268.6	268.3	267.9	270.5	......	267.7	268.1	268.1	268.3	268.6	268.7	269.0
15	......	268.2	267.8	270.4	268.4	267.7	268.1	268.2	268.3	......	268.7	268.9
16	268.7	268.2	267.8	......	268.3	267.6	......	268.3	268.3	268.7	268.7	268.9
17	268.7	268.3	267.8	270.2	268.3	267.6	268.1	268.4	......	268.7	268.6	......
18	268.6	268.2	267.8	270.1	268.3	......	268.0	268.6	268.3	268.7	268.6	268.8
19	268.6	......	......	270.0	268.2	268.3	267.9	268.6	268.3	268.7	......	268.7
20	268.6	268.2	268.4	269.9	268.1	268.4	267.9	......	268.3	268.6	268.6	268.7
21	268.5	268.1	268.9	269.9	......	268.6	267.9	268.5	268.3	268.6	268.6	268.8
22	......	268.1	269.0	269.9	268.0	268.7	267.8	268.4	268.3	......	268.5	269.2
23	268.6	268.1	269.1	......	267.9	268.7	......	268.3	268.2	268.7	268.5	269.3
24	268.5	268.0	269.4	269.8	267.9	268.8	267.7	268.2	......	268.7	268.3	......
25	268.3	268.0	270.2	269.7	267.8	......	267.6	268.1	268.2	268.7	268.3	269.5
26	268.0	......	......	269.6	267.8	269.0	267.5	268.1	268.1	268.6	......	269.3
27	268.3	268.1	271.3	269.5	267.8	269.0	267.5	......	268.1	268.6	268.5	269.2
28	268.4	268.0	271.4	269.4	......	269.0	267.4	268.1	268.0	268.5	268.4	269.1
29	......	......	271.4	269.4	267.7	269.0	267.4	268.0	268.0	......	268.5	269.5
30	268.5	......	271.4	......	267.6	268.9	......	268.3	268.0	268.6	268.5	269.5
31	268.5	......	271.3	......	267.6	......	267.6	268.5	......	268.5	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River above Curved Dam, Oswego, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	269.8	269.2	268.2	......	268.9	268.2	......	267.4	267.7	267.6	268.2	268.8
2	269.6	269.1	268.2	269.8	268.8	268.2	268.4	267.4	......	267.6	268.1	......
3	269.5	268.7	268.3	269.7	268.9	......	268.4	267.4	268.1	267.5	268.1	268.7
4	269.5	......	......	269.6	268.9	268.2	268.4	267.5	268.1	267.5	......	268.7
5	269.5	268.9	268.8	269.6	268.9	268.1	268.4	......	267.6	267.5	268.2	268.9
6	269.5	268.7	268.8	269.6	......	268.0	268.4	267.5	267.6	267.5	268.0	268.9
7	......	268.8	268.8	269.7	269.0	268.0	268.4	267.5	267.5	......	268.0	268.7
8	269.3	268.8	268.7	......	268.9	268.1	......	267.2	267.5	267.7	268.0	268.7
9	269.1	268.7	268.7	269.8	268.9	268.1	268.4	268.0	......	267.4	267.9	......
10	268.9	268.6	268.7	270.0	268.9	......	268.3	268.0	267.4	267.7	267.9	268.8
11	268.4	......	......	270.1	268.8	268.2	268.3	268.0	267.5	267.8	......	268.8
12	268.7	268.7	268.3	270.1	268.8	268.1	268.3	......	267.4	267.7	268.3	268.7
13	268.7	268.4	268.6	270.0	......	268.1	268.2	268.0	267.4	267.7	268.1	268.6
14	......	268.3	268.6	269.9	268.8	268.1	268.2	267.9	267.4	......	268.2	268.6
15	269.1	268.3	268.6	......	268.8	268.0	......	267.9	267.4	267.9	268.2	268.7
16	269.1	268.2	268.5	270.0	268.7	268.0	268.2	267.9	......	267.7	268.3	......
17	269.1	268.1	268.4	270.0	268.7	......	268.1	267.8	267.3	267.7	268.2	269.2
18	269.1	......	......	270.0	268.6	268.7	268.1	267.8	267.6	267.4	......	269.2
19	269.1	268.3	268.4	269.9	268.6	268.8	268.0	......	267.3	267.5	268.7	269.2
20	269.0	268.1	268.2	269.9	......	268.7	267.9	267.8	267.3	267.9	268.6	269.1
21	......	268.1	268.1	269.8	268.5	268.7	267.8	267.8	267.3	......	268.6	269.0
22	269.5	268.2	268.1	......	268.5	268.7	......	267.8	237.3	267.9	268.8	269.0
23	269.6	268.3	268.1	269.7	268.4	268.6	267.9	267.8	......	268.0	268.7	......
24	269.7	268.3	268.1	269.6	268.3	......	267.8	267.8	267.6	268.0	268.8	269.2
25	269.7	......	......	269.5	268.3	268.6	267.8	267.8	267.4	268.1	......	269.2
26	269.6	268.7	268.2	269.4	268.2	268.5	267.7	267.8	267.4	268.1	268.9	269.2
27	269.6	268.6	268.3	269.2	......	268.4	267.6	267.8	267.4	268.0	268.8	268.6
28	......	268.6	269.2	269.1	268.3	268.3	267.6	267.8	267.4	......	268.9	268.5
29	269.4	......	269.3	......	268.3	268.2	......	267.7	267.4	268.3	269.1	268.6
30	269.3	......	269.4	269.1	268.4	268.1	267.6	267.7	......	268.3	268.9	......
31	269.3	......	269.6	......	268.3	......	267.6	267.7	......	268.1	......	269.3

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River below High Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	272.1	270.6	269.3	269.0	268.7	268.6	269.1	268.5
2			......	......	272.1	270.5	269.3	268.8	268.7	268.4	269.1	268.5
3				......	272.0	270.4	268.9	268.8	268.6	268.6	269.0	268.5
4				......	272.0	270.3	269.1	268.8	268.4	268.6	269.0	268.3
5				......	271.9	270.1	269.2	268.7	268.7	268.6	268.9	268.5
6				......	271.8	270.3	269.2	268.7	268.7	268.5	268.5	269.0
7				273.0	271.7	270.2	269.1	268.5	268.7	268.6	269.0	268.5
8				273.0	271.5	270.1	269.1	268.8	268.7	268.5	268.7	268.4
9				272.9	271.6	270.1	269.0	268.6	268.7	268.4	268.8	268.2
10				272.9	271.5	270.1	268.8	268.6	268.6	268.6	268.8	268.5
11				273.0	271.4	270.0	269.2	268.6	268.4	268.7	268.7	268.4
12				272.9	271.3	269.8	269.0	268.5	268.6	268.7	268.7	268.6
13				272.9	271.2	270.0	269.0	268.4	268.5	268.8	268.5	268.6
14				272.8	271.1	269.9	269.0	268.2	268.5	268.8	268.8	268.5
15				272.8	271.0	269.8	269.0	268.6	268.6	268.8	268.7	268.5
16				272.7	271.1	269.8	269.0	268.7	268.5	268.6	268.7	268.5
17				272.6	271.0	269.8	268.7	268.5	268.6	269.0	268.7	268.5
18				272.6	270.9	269.7	269.1	268.5	268.5	268.8	268.7	268.5
19				272.6	270.9	269.5	269.0	268.4	268.7	268.7	268.7	268.5
20				272.5	270.9	269.8	268.9	268.5	268.6	268.7	268.4	268.5
21				272.4	270.9	269.6	268.8	268.4	268.7	268.8	268.7	268.5
22				272.4	270.8	269.6	268.8	268.8	268.6	269.0	268.6	268.5
23				272.3	270.9	269.5	268.8	268.8	268.5	268.8	268.6	268.5
24				272.2	270.9	269.5	268.4	268.8	268.5	269.2	268.6	268.5
25				272.3	270.8	269.4	269.0	268.9	268.3	269.2	268.6	268.4
26				272.2	270.8	269.3	268.5	268.7	268.6	269.2	268.5	268.9
27				272.2	270.7	269.4	268.3	268.7	268.6	269.1	268.5	268.9
28				272.2	270.7	269.4	268.3	268.5	268.6	269.1	268.7	270.0
29				272.2	270.5	269.3	268.4	268.8	268.6	269.2	268.6	269.8
30				272.1	270.7	269.3	268.4	268.7	268.6	268.8	268.5	270.0
31					270.6	......	268.1	268.7	......	269.2	......	270.0

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River below High Dam.

DAY.	Jan.	Feb.	March	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	269.9	270.2	270.0	272.3	270.1	268.4	269.7	268.4	269.1	268.4	269.2	269.4
2	270.1	270.3	270.0	272.2	270.1	268.4	269.5	268.3	269.2	268.6	269.2	269.3
3	270.0	270.4	270.0	272.2	270.0	268.3	269.5	268.3	269.2	268.5	269.2	269.4
4	269.3	270.3	269.9	272.6	270.0	268.0	269.5	268.3	269.5	268.8	269.3	270.0
5	269.7	270.0	269.8	272.6	269.9	268.4	269.5	268.6	269.2	268.8	269.1	270.0
6	269.6	270.3	269.8	272.1	269.8	268.4	269.4	268.5	269.2	268.7	269.4	270.0
7	269.7	270.2	269.8	272.1	269.7	268.4	269.3	268.8	269.1	268.6	269.3	270.0
8	269.6	270.3	269.8	273.0	269.8	268.5	269.2	268.6	269.1	268.2	269.4	270.0
9	270.0	270.3	269.9	271.9	269.7	268.4	269.0	268.6	269.0	268.6	269.4	270.0
10	270.0	270.3	269.8	271.8	269.6	268.4	269.2	268.4	268.8	268.4	269.5	269.7
11	270.0	270.3	269.8	271.8	269.6	268.1	269.0	268.4	268.9	268.5	269.5	269.8
12	270.1	270.1	269.7	271.8	269.5	268.5	268.9	268.3	268.9	269.0	269.4	269.9
13	270.2	270.3	269.7	271.7	269.4	268.5	268.9	268.8	268.8	269.1	269.6	269.9
14	270.2	270.3	269.6	271.6	269.3	268.5	268.9	268.7	268.8	269.2	269.5	269.9
15	270.1	270.2	269.5	271.5	269.5	268.4	268.9	268.8	268.8	269.2	269.3	269.7
16	270.1	270.3	269.5	271.3	269.4	268.4	268.7	268.9	268.8	269.4	269.3	269.5
17	270.1	270.3	269.4	271.2	269.2	268.4	268.9	268.9	268.9	269.3	269.3	269.4
18	270.2	270.3	269.4	271.1	269.2	268.9	268.7	269.1	268.9	269.2	269.3	269.5
19	270.2	270.0	269.5	271.0	269.1	269.3	268.7	269.0	268.8	269.3	269.1	269.5
20	270.2	270.2	270.5	270.9	269.0	269.3	268.6	268.9	268.8	269.3	269.4	269.5
21	270.2	270.3	271.1	270.8	268.9	269.3	268.5	269.1	268.8	269.2	269.3	269.5
22	270.0	270.3	271.4	270.8	269.0	269.5	268.4	268.9	268.8	269.2	269.2	270.0
23	270.2	270.3	271.5	270.7	268.9	269.6	268.3	268.8	268.8	269.3	269.2	270.1
24	270.0	270.2	271.8	270.7	268.8	269.7	268.4	268.8	268.7	269.3	269.1	270.2
25	270.1	270.1	272.5	270.6	268.8	269.3	268.3	268.7	268.7	269.3	269.0	270.3
26	269.8	270.0	273.4	270.5	268.7	269.8	268.1	268.6	268.7	269.2	268.9	270.3
27	270.1	270.1	273.3	270.4	268.7	269.9	268.1	268.5	268.7	269.2	269.2	270.0
28	270.1	270.1	272.9	270.4	268.5	269.8	268.0	268.5	268.6	269.2	269.0	270.0
29	270.0	......	272.9	270.3	268.7	269.8	268.0	268.4	268.5	268.9	269.1	270.2
30	270.2	....	272.9	270.2	268.6	269.8	268.3	268.8	268.4	269.2	269.2	270.5
31	270.1	......	272.7	......	268.5	......	268.0	269.4	......	269.2	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River below High Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	270.5	270.1	268.2	270.7	269.9	269.1	268.8	268.0	268.1	268.1	268.8	269.4
2	270.4	270.0	268.1	270.8	269.8	269.1	269.1	267.9	268.6	268.0	268.8	269.2
3	270.2	269.5	268.1	270.8	269.8	268.9	269.0	268.1	268.3	268.0	268.7	269.4
4	270.3	269.7	268.7	270.7	269.8	269.0	268.9	268.1	268.6	267.9	268.6	269.1
5	270.4	269.6	268.9	270.8	269.9	268.9	269.1	268.0	268.1	268.0	268.8	269.0
6	270.4	269.5	268.9	270.8	269.8	268.8	269.0	268.4	268.0	268.0	268.7	269.0
7	270.0	269.5	269.2	270.8	270.1	268.8	269.0	268.2	267.9	268.0	268.7	269.4
8	270.2	269.4	269.3	270.7	270.0	268.9	268.9	268.0	268.0	268.1	268.6	269.0
9	270.0	269.3	269.3	270.8	269.9	268.9	269.1	268.5	268.0	268.1	268.6	269.5
10	269.4	269.4	269.3	271.2	269.8	269.1	268.9	268.4	267.9	268.2	268.6	269.5
11	269.5	269.2	269.2	271.2	269.7	269.3	268.9	268.4	268.0	268.1	268.4	269.6
12	269.9	269.0	269.4	271.2	269.7	269.1	268.9	268.4	267.9	268.2	268.9	269.4
13	269.7	268.9	269.3	271.1	269.5	269.0	268.9	268.5	267.9	268.2	268.8	269.4
14	269.5	268.8	269.2	271.1	269.7	269.0	268.8	268.3	267.9	268.2	268.8	269.4
15	269.8	268.5	269.1	271.0	269.7	268.9	268.8	268.4	267.9	268.2	268.8	269.4
16	269.8	268.4	269.0	271.2	269.7	268.9	268.8	268.4	267.6	268.2	268.8	269.7
17	269.8	268.2	269.0	271.1	269.6	269.2	268.7	268.3	267.7	268.1	268.8	270.0
18	269.8	268.2	268.9	271.1	269.6	269.6	268.6	268.2	268.0	268.2	268.9	270.0
19	269.8	268.1	269.0	271.0	269.5	269.7	268.6	268.2	267.8	268.1	269.3	270.0
20	269.8	268.1	268.9	270.9	269.4	269.7	268.6	268.3	267.7	268.5	269.2	269.7
21	269.9	268.1	268.7	270.9	269.5	269.7	268.5	268.3	267.8	268.3	269.2	270.0
22	270.4	268.1	268.7	270.6	269.4	269.6	268.4	268.4	267.9	268.6	269.5	269.8
23	270.5	268.2	268.5	270.9	269.3	269.5	268.6	268.3	267.9	268.7	269.3	269.5
24	270.5	268.2	268.7	270.7	269.2	269.4	268.4	268.3	267.9	268.7	269.4	269.4
25	270.6	268.2	268.5	270.5	269.1	269.5	268.4	268.3	268.0	268.7	269.4	269.2
26	270.5	268.5	268.8	270.5	269.1	269.3	268.3	268.1	267.8	268.7	269.5	269.4
27	270.5	268.4	269.1	270.4	268.9	269.3	268.2	268.2	267.9	268.7	269.5	269.2
28	270.3	268.3	270.0	270.2	269.3	269.1	268.1	268.3	267.9	268.6	269.5	269.2
29	270.3	......	270.5	269.9	269.2	269.0	268.2	268.2	267.9	268.9	269.5	269.2
30	270.2	......	270.6	270.1	269.1	268.9	268.2	268.2	268.4	268.9	269.5	269.5
31	270.2	......	270.7	......	269.2	......	267.9	268.1	......	268.8	......	......

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River above High Dam.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	286.5	285.1	283.7	283.2	282.8	283.9	285.3	284.4
2	......	......	......	......	286.5	285.0	283.7	283.0	282.8	283.5	285.3	284.4
3	......	......	......	......	286.4	284.9	283.3	283.0	282.7	283.9	285.3	284.4
4	......	......	......	......	286.3	284.8	283.5	283.0	282.5	283.9	285.2	284.1
5	......	......	......	......	286.3	284.6	283.6	282.9	282.8	283.9	285.2	284.4
6	......	......	......	......	286.2	284.8	283.6	282.9	282.8	283.9	284.8	284.4
7	......	......	......	287.2	286.1	284.7	283.5	282.7	282.8	283.9	285.3	284.4
8	......	......	......	287.2	286.0	284.6	283.5	283.1	282.8	283.9	285.0	284.3
9	......	......	......	287.1	286.1	284.6	283.4	282.9	282.8	283.8	285.1	284.0
10	......	......	......	287.1	286.0	284.6	283.2	282.9	282.8	284.2	285.1	284.1
11	......	......	......	287.2	285.9	284.5	283.6	282.8	282.6	284.4	285.0	283.9
12	......	......	......	287.1	285.8	284.3	283.4	282.7	282.8	284.4	284.9	284.2
13	......	......	......	287.1	285.7	284.6	283.4	282.6	282.7	284.5	284.5	284.1
14	......	......	......	287.0	285.6	284.5	283.4	282.4	282.7	284.2	284.9	284.1
15	......	......	......	287.0	285.5	284.4	283.3	282.9	282.8	284.2	284.7	284.1
16	......	......	......	287.0	285.6	284.4	283.3	283.0	282.7	283.9	284.6	284.0
17	......	......	......	286.9	285.5	284.4	282.9	282.8	282.7	284.9	284.6	283.9
18	......	......	......	286.9	285.4	284.3	283.3	282.7	282.5	284.7	284.6	283.8
19	......	......	......	286.9	285.4	284.0	283.2	282.7	282.8	284.7	284.6	283.9
20	......	......	......	286.8	285.4	284.3	283.1	282.8	283.1	284.8	284.3	283.9
21	......	......	......	286.7	285.4	284.1	283.0	282.6	283.2	284.9	284.7	283.9
22	......	......	......	286.7	285.2	284.1	282.9	283.0	283.1	285.3	284.5	283.9
23	......	......	......	286.6	285.4	284.0	282.9	283.0	283.1	284.9	284.5	284.0
24	......	......	......	286.6	285.4	284.0	282.5	282.9	283.1	285.5	284.6	284.0
25	......	......	......	286.6	285.3	283.9	283.0	283.0	282.7	285.5	284.5	283.7
26	......	......	......	286.5	285.3	283.7	283.0	282.9	284.1	285.4	284.4	284.1
27	......	......	......	286.5	285.2	283.8	283.0	282.9	283.8	285.3	284.3	284.3
28	......	......	......	286.5	285.2	282.8	283.0	282.6	283.8	285.4	284.6	285.3
29	......	......	......	286.6	285.0	283.7	283.1	282.9	283.9	285.4	284.5	285.2
30	......	......	......	286.5	285.2	283.7	283.1	282.8	283.9	284.9	284.4	285.4
31	......	......	......	......	285.1	......	282.7	282.8	......	285.5	......	285.5

* Gage defective.

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River above High Dam.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	285.2	284.7	284.4	287.8	285.4	283.8	285.0	283.7	284.5	283.5	284.6	284.7
2	285.4	284.6	284.4	287.7	285.3	283.7	284.8	283.7	284.5	283.9	284.5	284.7
3	285.3	284.6	284.4	287.7	285.3	283.6	284.9	283.6	284.6	283.8	284.6	284.7
4	284.6	284.5	284.3	287.6	285.3	283.4	284.9	283.6	284.9	283.8	284.6	285.3
5	284.9	284.4	284.3	287.6	285.2	283.7	284.8	283.5	284.8	283.8	284.4	285.3
6	285.0	284.8	284.3	287.6	285.2	283.7	284.8	283.3	284.8	283.8	284.8	285.3
7	285.1	284.5	284.2	287.5	285.1	283.6	284.7	283.6	284.8	283.8	284.7	285.3
8	285.0	284.4	284.2	287.9	285.2	283.8	284.6	283.9	284.7	283.5	284.9	285.4
9	285.2	284.5	284.3	287.3	285.1	283.8	284.4	283.9	284.6	283.8	284.9	285.4
10	285.2	284.5	284.3	287.2	284.9	283.8	284.5	283.2	284.4	283.8	284.9	285.1
11	285.2	284.5	284.2	287.1	284.9	283.9	284.4	283.2	284.6	283.8	284.9	285.2
12	285.2	284.4	284.2	287.1	284.9	283.9	284.3	283.3	284.6	284.3	284.7	285.3
13	285.3	284.5	284.2	287.0	284.8	283.8	284.2	283.1	284.5	284.9	285.0	285.3
14	285.3	284.4	284.2	286.9	284.6	283.8	284.3	283.7	284.4	284.5	284.9	285.3
15	285.1	284.5	284.2	286.8	284.8	283.8	284.2	283.8	284.4	284.5	285.0	285.1
16	285.2	284.6	284.2	286.6	284.7	283.7	284.1	284.0	284.4	284.8	285.0	284.9
17	285.2	284.5	284.1	286.5	284.6	283.8	284.2	284.1	284.1	284.6	285.0	284.8
18	285.2	284.6	284.2	286.5	284.6	284.3	284.1	284.3	284.6	284.6	284.8	284.9
19	285.2	284.2	284.5	286.4	284.5	284.7	284.0	284.2	284.4	284.7	284.5	284.8
20	285.1	284.3	285.3	286.3	284.4	284.7	283.9	283.9	284.3	284.7	284.9	284.8
21	285.1	284.4	285.7	286.2	284.2	284.7	283.9	284.3	284.2	284.6	284.7	284.8
22	284.9	284.4	285.6	286.1	284.4	284.9	283.8	284.1	284.2	284.5	284.6	285.4
23	285.1	284.4	285.8	286.0	284.2	285.0	283.6	283.9	284.2	284.7	284.6	285.5
24	285.0	284.4	285.9	286.0	284.2	285.0	283.8	283.9	283.9	284.7	284.5	285.4
25	284.8	284.4	286.4	285.9	284.1	284.7	283.6	283.7	284.1	284.7	284.5	285.5
26	284.5	284.2	287.6	285.8	284.1	285.2	283.5	283.7	284.1	284.7	284.2	285.6
27	284.7	284.4	288.1	285.7	284.0	285.2	283.4	283.9	284.0	284.6	284.6	285.4
28	284.8	284.4	288.3	285.7	283.8	285.2	283.4	283.8	283.9	284.6	284.5	285.4
29	284.6	......	288.4	285.6	284.1	285.2	283.4	283.9	283.8	284.3	284.6	285.5
30	284.3	......	288.4	285.5	283.9	285.2	283.6	284.6	283.8	284.7	284.5	285.8
31	284.8	......	288.1	......	283.9	......	283.4	284.8	......	284.6	......	......

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River above High Dam.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	285.7	285.4	284.2	286.0	285.3	284.5	284.2	283.8	283.2	283.2	284.0	284.6
2	285.6	285.3	284.6	286.0	285.2	284.5	284.4	283.8	283.0	283.1	284.0	284.5
3	285.5	284.7	284.5	286.1	285.1	284.2	284.3	283.4	283.1	283.2	283.9	284.6
4	285.6	285.0	285.1	286.0	285.2	284.4	284.3	283.4	283.2	283.3	283.6	284.4
5	285.7	284.9	285.3	286.1	285.3	284.3	284.5	283.2	283.2	283.2	284.0	284.3
6	285.7	284.8	285.3	286.2	285.1	284.3	284.4	283.7	283.2	283.2	283.8	284.3
7	285.3	284.7	285.2	286.1	285.4	284.3	284.4	283.6	283.2	283.1	283.8	284.7
8	285.6	284.6	285.2	286.0	285.3	284.3	284.3	283.5	283.2	283.5	283.7	284.3
9	285.3	284.6	285.2	286.1	285.3	284.3	284.5	283.5	283.0	283.4	283.7	284.8
10	284.8	284.7	285.1	286.4	285.2	284.2	284.4	283.6	283.1	283.5	283.7	284.8
11	284.9	284.5	284.9	286.5	285.1	284.6	284.4	283.5	283.1	283.4	283.5	284.7
12	285.3	284.4	285.1	286.5	285.1	284.4	284.4	283.3	283.1	283.4	284.2	284.7
13	285.1	284.4	284.9	286.5	284.9	284.4	284.3	283.5	283.1	283.5	284.1	284.7
14	284.9	284.5	284.8	286.4	285.1	284.3	284.3	283.4	283.1	283.4	284.1	284.7
15	285.2	284.4	284.8	286.3	285.1	284.3	284.1	283.4	283.1	283.5	284.1	284.8
16	285.1	284.3	284.7	286.5	285.1	284.2	284.2	283.4	282.8	283.5	284.1	285.0
17	285.2	284.2	284.7	286.4	285.0	284.4	284.1	283.3	283.0	283.4	284.1	285.3
18	285.2	284.2	284.5	286.4	285.0	284.9	284.0	283.3	283.1	283.5	284.1	285.2
19	285.2	284.4	284.7	286.3	284.9	285.0	284.0	283.2	283.0	283.4	284.6	285.2
20	285.2	284.4	284.6	286.3	284.7	285.0	284.0	283.4	283.0	283.7	284.5	285.0
21	285.2	284.5	284.4	286.2	284.8	284.9	283.9	283.4	283.0	283.5	284.5	285.2
22	285.7	284.6	284.4	286.0	284.8	284.9	283.8	283.4	283.1	283.9	284.7	285.1
23	285.7	284.7	284.2	286.0	284.7	284.8	284.0	283.4	282.8	284.0	284.6	284.8
24	285.8	284.7	284.3	285.9	284.6	284.6	283.8	283.4	283.3	283.9	284.7	284.8
25	285.8	284.6	284.1	285.8	284.6	284.8	283.7	283.3	283.1	283.8	284.6	284.5
26	285.8	285.1	284.9	285.7	284.5	284.6	283.7	283.0	283.0	283.8	284.8	284.8
27	285.7	284.9	285.7	285.7	284.3	284.6	283.6	283.3	283.1	283.7	284.7	284.8
28	285.5	284.9	285.7	285.5	284.7	284.5	283.5	283.4	283.1	283.7	284.7	284.8
29	285.6	......	285.8	285.2	284.6	284.4	283.8	283.3	283.1	284.1	284.7	284.8
30	285.5	......	285.9	285.4	284.5	284.3	283.6	283.3	282.9	284.1	284.7	......
31	285.4	......	286.0	......	284.6	......	283.3	283.2	......	284.0	......	285.3

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* Gage defective.

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River below Minetto Dam.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	294.0	292.3	291.0	290.6	290.4	290.9	291.6	291.0
2	......	......	......	......	294.0	292.2	290.9	290.5	290.4	290.2	291.6	291.0
3	......	......	......	......	293.9	292.1	290.7	290.4	290.4	291.3	291.5	291.0
4	......	......	......	......	293.9	292.1	290.9	290.4	290.0	291.5	291.5	290 9
5	......	......	......	......	293.9	291.8	290.9	290.4	290.4	291.5	291.5	291.1
6	......	......	......	......	293.8	291.9	290.9	290.4	290.4	291.4	291.1	291.0
7	......	......	......	......	293.7	291.9	290.9	290.0	290.5	291.4	291.7	291.0
8	......	......	......	294.8	293.6	291.8	290.9	290.4	290.4	291.5	291.6	291.0
9	......	......	......	294.8	293.5	291.8	290.8	290.3	290.5	290.9	291.5	291.0
10	......	......	......	294.7	293.5	291.8	290.7	290.3	290.6	291.7	291.3	291.0
11	......	......	......	294.8	293.4	291.8	290.8	290.2	290.3	291.7	291.2	290.2
12	......	......	......	294.7	293.3	291.6	290.8	290.1	290.6	291.7	291.2	290.9
13	......	......	......	294.6	293.2	291.6	290.8	290.1	290.6	291.9	291.1	290 8
14	......	......	......	294.6	293.1	291.5	290.7	289.8	290.7	291.8	291.5	290.8
15	......	......	......	294.6	292.9	291.5	290.7	290.1	290.9	291.8	291.2	290.7
16	......	......	......	294.5	293.0	291.5	290.8	290.1	290.8	291.2	291.3	290.6
17	......	......	......	294.5	292.9	291.4	290.5	290.1	290.7	291.8	291.3	290.6
18	......	......	......	294.4	292.9	291.4	290.7	290 0	290.0	291.7	291.2	290.5
19	......	......	......	294.4	292.8	291.2	290.6	289.9	290.5	291.7	291.2	290.7
20	......	......	......	294.4	292.8	291.4	290.6	290.1	290.5	291.6	290.9	290.6
21	......	......	......	294.3	292.7	291.3	290.5	290.0	290.5	291.4	291.3	290.6
22	......	......	......	294.3	292.5	291.3	290.5	290.3	290.5	291.5	291.2	290.6
23	......	......	......	294.2	292.7	291.2	290.6	290.3	290.5	291.1	291.1	290.7
24	......	......	......	294.0	292.7	291.2	290.1	290.4	290.5	291.5	291.2	290.7
25	......	......	......	294.0	292.6	291.1	290.6	290.4	289.8	291.5	291.1	290.6
26	......	......	......	294.0	292.6	290.9	290.2	290.3	290.8	291.5	291.1	290.7
27	......	......	......	294.0	292.5	291.1	290.4	290.3	290.9	291.5	290.8	291.1
28	......	......	......	294.0	292.4	291.0	290.4	289.8	290.9	291.5	291.1	292.3
29	......	......	......	294.0	292.3	291.0	290.4	290.3	291.0	291.5	291.0	292.2
30	......	......	......	294.0	292.4	291.0	290.4	290.2	290.9	291.1	290.9	292.1
31	......	......	......	......	292.4	......	290.2	290.3	......	291.6	......	292.1

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River below Minetto Dam.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	292.0	292.0	......	294.7	292.4	290.7	292.0	290.6	290.4	289.8	290.8	291.0
2	292.4	292.1	......	294.7	292.3	290.6	291.9	290.6	290.3	290.1	290.7	291.0
3	292.3	292.1	......	294.6	292.3	290.4	292.0	290.5	290.4	290.1	290.8	291.1
4	292.2	292.2	......	294.5	292.3	290.0	292 0	290.5	290.6	290.1	290.8	291.3
5	292.1	292.1	......	294.3	292.2	290.4	291.9	290.4	290.5	290.1	290.5	291.4
6	291.9	292.2	......	294.3	292.2	290.5	291.8	290.2	290.5	290.0	291.1	291.6
7	292.1	291.9	......	294.2	292.0	290.4	291.7	290.4	290.5	290.0	291.1	291.6
8	291.8	292.1	......	294.2	292.0	290.7	291.6	290.6	290.4	289.8	291.1	291.7
9	292.0	292.1	......	294.2	291.9	290.7	291.4	290.6	290.3	290.1	291.1	291.7
10	291.9	292.1	......	294.1	291.8	290.7	291.5	290.3	290.2	290.1	291.1	291.4
11	292.1	292 0	......	294 1	291.8	290.1	291.4	290.3	290.7	290.1	291.2	291.5
12	292.3	†	......	294.0	291.8	290.7	291.3	290.4	290.6	290.5	291.0	291.6
13	292.4	......	......	293 8	291.7	290.7	291.3	290.2	290.4	290.6	291.1	291.5
14	292.2	......	......	293.8	291.5	290 8	291.3	290.4	290.3	290.7	291.1	291.5
15	292.2	......	......	293.7	291.7	290.7	291.2	290.5	290.3	290.8	291.1	291.5
16	292.1	......	......	293.5	291.6	290.6	291.2	290.6	290.4	290.9	291.1	291.4
17	292.1	......	......	293.4	291.5	290.7	291.3	290.7	290.0	290.8	291.1	291.2
18	292.1	......	......	293.3	291.5	291.2	291.2	290.8	290.6	290.8	291.1	291.5
19	292.2	......	......	293.2	291.4	291.6	291.1	290.7	290.4	290.9	290.8	291.3
20	292.2	......	......	293.2	291.3	291.6	291.0	290.5	290.3	290.9	291.0	291.2
21	292.1	......	......	293.2	291.0	291.7	291.0	290.7	290.3	290.8	291.0	291.4
22	291.6	......	......	293.2	291.2	291.9	290.7	290.5	290.4	290.8	291.0	291.7
23	292.1	......	......	293.0	291.2	291.9	290.7	290.4	290.3	290.9	290.9	291.7
24	292.2	......	......	293.0	291.1	292.0	290.6	290.3	290.0	290.9	290.9	291.7
25	292.1	......	......	292.9	291.0	291.9	290.5	290 2	290.3	290.9	290.8	291.8
26	291.9	......	......	292.8	291.0	292.1	290.5	290.1	290.2	290.8	290.3	291.9
27	291.8	......	......	292 8	291.0	292.2	290.4	290.2	290.2	290.8	290.8	291.9
28	292.1	......	......	292.7	290.7	292.1	290.4	290.3	290.1	290.7	290.8	291.8
29	292.1	......	......	292.6	290.8	292.1	290.4	290.1	290.1	290.4	290.8	292.0
30	291.9	......	......	292.4	290.8	292.1	290.4	290.5	290.1	290.8	290.9	292.1
31	291.8	......	......	......	290.7	......	290.4	290.6	......	290 8	......	......

* Gage defective. † Discontinued on account of ice.

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River below Minetto Dam.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	291.9	291.9	291.4	292.6	291.9	291.1	290.9	289.9	289.8	290.0	290.5	291.1
2	292.0	291.5	291.5	292.7	291.9	291.1	291.0	289.9	289.6	289.9	290.5	290.8
3	291.9	291.1	291.8	292.7	291.9	291.1	291.0	289.9	289.8	289.7	290.4	290.9
4	292.0	291.6	291.5	292.6	291.8	291.0	290.9	290.0	289.9	289.7	290.0	290.9
5	292.0	291.5	291.9	292.7	291.9	291.0	291.1	290.0	289.8	289.8	290.3	290.9
6	292.0	291.2	291.7	292.7	291.8	290.9	291.1	290.1	289.8	289.9	290.4	290.9
7	291.8	291.2	291.8	292.6	291.9	290.9	291.1	290.3	289.8	289.6	290.3	291.1
8	291.9	291.3	291.7	292.5	291.9	290.9	291.0	290.3	289.7	290.0	290.2	291.1
9	291.8	291.4	291.6	292.8	291.8	290.9	291.0	290.2	289.5	290.0	290.1	291.0
10	291.5	291.2	291.6	293.1	291.8	......	291.0	290.3	289.7	290.1	290.2	291.0
11	291.8	291.0	291.4	293.2	291.8	290.9	290.9	290.3	289.8	290.1	290.0	291.2
12	291.7	291.4	291.4	293.1	291.7	290.9	290.9	290.0	289.7	290.0	290.4	291.2
13	291.9	291.1	291.4	293.1	291.8	290.9	290.9	290.1	289.6	290.1	290.4	291.2
14	291.7	291.0	291.3	292.8	291.9	290.9	290.9	290.2	289.7	289.8	290.5	291.1
15	291.8	290.9	291.3	293.0	291.8	290.8	290.6	290.1	289.7	290.3	290.5	291.1
16	291.7	290.8	291.2	293.2	291.7	290.8	290.8	290.0	289.5	290.1	290.5	291.4
17	291.8	290.7	291.1	293.1	291.6	291.0	290.7	290.0	289.9	290.0	290.6	291.7
18	291.7	290.9	290.8	293.0	291.5	291.2	290.6	290.0	289.7	290.0	290.5	291.7
19	291.6	291.0	291.2	292.9	291.4	291.4	290.6	290.1	289.6	290.1	290.7	291.8
20	291.6	290.9	291.0	292.9	291.3	291.5	290.5	290.3	289.6	290.4	290.7	291.9
21	291.6	291.0	290.9	292.8	291.3	291.5	290.5	290.1	289.6	290.0	290.9	291.8
22	292.2	291.1	290.8	292.6	291.3	291.5	290.3	290.1	289.6	290.6	291.1	291.6
23	292.2	291.1	290.6	292.7	291.3	291.4	290.5	290.1	289.6	290.5	291.1	291.2
24	292.3	291.2	290.8	292.6	291.2	291.2	290.4	290.0	290.0	290.4	291.2	291.3
25	292.3	291.2	290.3	292.4	291.1	291.2	290.2	290.0	289.6	290.4	291.1	291.3
26	292.2	291.7	290.7	292.3	291.0	291.2	290.1	289.9	289.6	290.4	291.3	291.2
27	292.1	291.4	291.2	292.2	291.0	291.2	290.1	290.1	289.7	290.4	291.2	291.2
28	292.2	291.3	292.3	292.1	291.3	291.1	290.0	290.1	289.7	290.2	291.2	291.2
29	292.1	......	292.4	291.9	291.2	291.1	290.0	290.0	289.7	290.5	291.2	291.2
30	292.0	......	292.6	292.0	291.1	291.1	290.2	290.0	289.5	290.5	291.2	291.1
31	291.9	......	292.7	......	291.1	......	290.0	290.0	......	290.5	......	291.3

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River above Minetto Dam.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	301.7	300.3	299.2	298.7	298.9	299.9	300.5	300.0
2	......	......	......	......	301.7	300.3	299.1	298.6	298.9	299.4	300.5	300.0
3	......	......	......	......	301.6	300.2	298.9	298.6	299.0	300.6	300.5	300.0
4	......	......	......	......	301.6	300.1	299.1	298.6	298.6	300.7	300.4	299.9
5	......	......	......	......	301.6	299.9	299.2	298.6	299.0	300.8	300.4	300.1
6	......	......	......	......	301.5	300.1	299.1	298.6	299.1	300.7	300.1	300.9
7	......	......	......	......	301.4	300.0	299.1	298.3	299.2	300.8	300.5	300.0
8	......	......	......	302.3	301.3	299.9	299.1	298.6	299.1	300.9	300.4	300.0
9	......	......	......	302.3	301.3	299.9	299.0	298.5	299.1	300.3	300.3	300.0
10	......	......	......	302.3	301.2	299.9	298.9	298.5	299.2	301.1	300.2	299.9
11	......	......	......	302.3	301.1	299.9	299.0	298.5	299.0	301.1	300.1	299.3
12	......	......	......	302.2	301.0	299.7	298.9	298.4	299.5	301.1	300.1	299.9
13	......	......	......	302.2	300.9	299.8	299.0	298.4	299.5	301.4	300.0	299.8
14	......	......	......	302.2	300.8	299.7	298.9	297.9	299.6	301.2	300.4	299.8
15	......	......	......	302.2	300.7	299.7	298.9	298.4	299.7	301.2	300.2	299.8
16	......	......	......	302.1	300.7	299.7	299.0	298.4	299.7	300.7	300.3	299.7
17	......	......	......	302.1	300.6	299.7	298.6	298.4	299.5	301.4	300.2	299.7
18	......	......	......	302.0	300.6	299.6	298.8	298.3	298.9	301.2	300.1	299.6
19	......	......	......	302.0	300.6	299.4	298.7	298.3	299.4	301.2	300.1	299.8
20	......	......	......	302.0	300.6	299.6	298.7	298.4	299.4	300.8	299.9	299.7
21	......	......	......	301.9	300.5	299.5	298.6	298.4	299.4	300.4	300.2	299.7
22	......	......	......	301.9	300.5	299.5	298.6	298.6	299.4	300.4	300.2	299.7
23	......	......	......	301.8	300.6	299.4	298.7	298.6	299.4	300.1	300.1	299.8
24	......	......	......	301.8	300.6	299.4	298.3	298.7	299.4	300.4	300.1	299.7
25	......	......	......	301.7	300.5	299.4	298.7	298.8	298.8	300.4	300.0	299.7
26	......	......	......	301.7	300.5	299.3	298.4	298.7	299.8	300.4	300.0	299.8
27	......	......	......	301.7	300.5	299.4	298.6	298.7	299.9	300.4	299.8	300.2
28	......	......	......	301.7	300.4	299.2	298.6	298.2	299.9	300.4	300.1	301.0
29	......	......	......	301.8	300.3	299.2	298.6	298.7	300.0	300.5	300.0	300.9
30	......	......	......	301.8	300.5	299.2	298.6	298.6	299.9	300.1	300.0	300.8
31	......	......	......	......	300.3	......	298.4	298.7	......	300.4	......	300.8

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* Gage defective.

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River above Minetto Dam.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	300.8	300.5	......	302.8	300.6	299.2	300.3	299.4	299.4	298.6	299.4	299.6
2	301.0	300.7	......	302.7	300.5	299.1	300.2	299.3	299.6	298.9	299.3	299.6
3	300.9	300.8	......	302.7	300.5	299.0	300.2	299.3	299.3	298.9	299.4	299.6
4	300.8	300.7	......	302.7	300.5	298.9	300.2	299.3	299.5	298.9	299.4	299.8
5	300.6	300.4	......	302.7	300.4	299.1	300.1	299.2	299.5	298.9	299.2	299.9
6	300.5	300.5	......	302.3	300.4	299.2	300.1	299.0	299.4	298.8	299.6	300.1
7	300.7	300.8	......	302.1	300.3	299.1	300.0	299.2	299.4	298.8	299.6	300.0
8	300.5	300.7	......	301.9	300.3	299.2	299.9	299.2	299.4	298.5	299.6	300.1
9	300.6	300.6	......	302.0	300.2	299.1	299.8	299.1	299.4	298.9	299.6	300.1
10	300.4	300.5	......	302.0	300.1	299.1	299.9	299.0	299.1	298.9	299.6	299.8
11	300.7	300.7	......	301.9	300.1	298.8	299.8	298.9	299.5	298.9	299.7	299.9
12	300.5	......	......	301.8	300.1	299.2	299.7	298.9	299.4	299.2	299.5	300.0
13	300.4	......	......	301.6	300.0	299.2	299.7	299.0	299.2	299.3	299.6	300.0
14	300.6	......	......	301.6	299.8	299.3	299.7	299.0	299.1	299.4	299.6	300.0
15	300.3	......	......	301.6	300.0	299.2	299.7	299.1	299.1	299.3	299.6	300.1
16	300.2	......	......	301.4	299.9	299.1	299.7	299.2	299.1	299.6	299.6	299.9
17	300.2	......	......	301.4	299.8	299.2	299.8	299.3	298.7	299.5	299.5	299.6
18	300.3	......	......	301.3	299.8	299.6	299.7	299.4	299.3	299.4	299.5	299.9
19	300.6	......	......	301.3	299.7	299.9	299.6	299.4	299.2	299.5	299.3	299.7
20	300.5	......	......	301.2	299.6	299.9	299.6	299.2	299.1	299.5	299.5	299.6
21	300.3	......	......	301.2	299.5	300.0	299.5	299.3	299.1	299.4	299.5	299.8
22	300.7	......	......	301.2	299.6	300.2	299.4	299.4	299.2	299.4	299.5	300.1
23	300.6	......	......	301.1	299.6	300.2	299.4	299.3	299.1	299.5	299.4	300.1
24	300.7	......	......	301.1	299.5	300.3	299.4	299.2	298.8	299.5	299.4	300.1
25	300.6	......	......	301.0	299.5	300.2	299.3	299.1	299.1	299.5	299.3	300.2
26	300.5	......	......	300.9	299.5	300.4	299.2	298.9	299.0	299.4	299.1	300.3
27	300.5	......	......	300.9	299.5	300.5	299.1	299.1	299.0	299.4	299.3	300.2
28	300.6	......	......	300.8	299.2	300.4	299.1	299.3	298.9	299.4	299.3	300.1
29	300.7	......	......	300.7	299.4	300.4	299.1	299.4	298.9	299.2	299.4	300.3
30	301.0	......	......	300.6	299.3	300.4	299.4	299.5	298.9	299.4	299.5	300.4
31	300.8	......	......	......	299.2	......	299.4	299.6	......	299.4	......	......

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River above Minetto Dam.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	300.2	300.4	299.8	300.8	300.2	299.6	299.4	298.7	298.4	299.5	299.9	300.4
2	300.3	300.0	299.8	301.0	300.2	299.6	299.6	298.7	298.2	299.4	299.9	300.1
3	300.3	299.7	299.9	301.0	300.2	299.6	299.5	298.6	298.3	299.3	299.9	300.2
4	300.3	300.0	299.9	300.9	300.2	299.6	299.4	298.7	298.3	299.3	299.6	300.2
5	300.3	299.9	300.2	300.9	300.2	299.5	299.5	298.8	298.3	299.3	299.8	300.2
6	300.3	299.8	300.1	301.0	300.2	299.4	299.6	298.9	298.3	299.4	299.9	300.3
7	300.1	299.8	300.1	300.9	300.2	299.4	299.6	299.0	298.3	299.2	299.9	300.3
8	300.2	299.7	300.1	300.8	300.2	299.4	299.5	299.0	298.3	299.5	299.8	300.4
9	300.1	299.8	300.1	301.0	300.1	299.5	299.5	299.0	298.3	299.5	299.7	300.4
10	299.9	299.7	300.0	301.3	300.1	299.5	299.5	299.0	298.4	299.6	299.8	300.5
11	300.1	299.5	299.8	301.3	300.1	299.7	299.4	299.0	298.5	299.6	299.5	300.5
12	300.0	300.0	299.8	301.3	300.0	299.6	299.4	298.7	298.4	299.5	300.0	300.5
13	300.1	299.8	299.8	301.2	300.1	299.5	299.4	298.7	298.3	299.6	300.0	300.5
14	300.0	299.6	299.8	301.2	300.2	299.5	299.4	298.8	298.4	299.3	300.0	300.4
15	300.2	299.5	299.7	301.1	300.1	299.5	......	298.8	298.4	299.8	300.0	300.4
16	300.1	299.4	299.8	301.2	300.0	299.4	299.4	298.7	298.2	299.6	300.0	300.6
17	300.2	299.5	299.7	301.2	300.0	299.7	299.3	298.7	298.4	299.5	300.1	300.8
18	300.1	299.5	299.4	301.2	300.0	299.9	299.2	298.7	298.2	299.5	300.0	300.6
19	300.1	299.6	299.6	301.1	299.9	300.0	299.2	298.7	298.2	299.6	300.2	300.8
20	300.1	299.5	299.4	301.1	299.8	300.0	299.1	298.8	299.1	299.8	300.1	300.8
21	300.1	299.6	299.4	301.2	299.8	300.0	299.1	298.6	299.1	299.5	300.2	300.9
22	300.6	299.7	299.3	300.9	299.8	300.0	299.0	298.7	299.1	300.0	300.5	300.9
23	300.6	299.6	299.2	300.8	299.8	299.9	299.2	298.7	299.1	300.0	300.5	300.8
24	300.6	299.7	299.3	300.8	299.7	299.7	299.1	298.6	299.6	299.9	300.6	300.7
25	300.7	299.7	299.1	300.7	299.6	299.7	299.0	298.6	299.2	299.9	300.4	300.4
26	300.6	300.2	299.2	300.6	299.5	299.7	298.9	298.5	299.2	299.9	300.6	300.4
27	300.6	299.9	299.7	300.5	299.5	299.7	298.8	298.7	299.3	299.9	300.6	300.4
28	300.6	299.8	300.5	300.4	299.7	299.7	298.8	298.7	299.2	299.9	300.5	300.4
29	300.5	......	300.7	300.2	299.7	299.6	298.7	298.6	299.3	300.0	300.5	300.4
30	300.4	......	300.8	300.3	299.6	299.5	299.0	298.7	299.1	300.0	300.5	300.4
31	300.4	......	300.9	......	299.6	......	298.8	298.5	......	299.9	......	299.9

* Gage defective.

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River below Battle Island Dam.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	307.7	304.7	304.0	303.6	303.3	303.0	306.6	303.1
2	......	......	......	......	307.5	304.7	303.9	303.7	303.3	303.0	303.5	303.1
3	......	......	......	......	307.6	304.6	303.8	303.6	303.3	303.1	303.5	303.0
4	......	......	......	......	307.3	304.5	303.8	303.6	303.0	303.1	303.4	302.9
5	......	......	......	......	307.1	304.5	303.7	303.6	303.0	303.2	303.4	303.1
6	......	......	......	......	306.9	304.4	303.6	303.6	303.0	303.2	303.4	303.1
7	......	......	......	......	306.9	304.3	303.6	303.8	303.2	303.2	303.4	303.1
8	......	......	......	......	306.9	304.4	303.6	303.8	302.9	303.2	303.4	303.1
9	......	......	......	......	306.9	304.3	303.5	303.7	302.9	303.1	303.4	303.1
10	......	......	......	......	306.7	304.4	303.5	303.7	302.9	303.1	303.3	303.1
11	......	......	......	309.2	306.6	304.4	303.6	303.7	302.9	303.1	303.3	302.6
12	......	......	......	309.2	306.4	304.5	303.5	303.6	302.9	303.2	303.3	303.1
13	......	......	......	308.8	306.2	304.5	303.5	303.5	302.9	303.4	303.3	303.1
14	......	......	......	308.8	306.1	304.4	303.5	303.7	302.9	303.3	303.3	303.0
15	......	......	......	308.8	306.1	304.4	303.5	303.7	302.9	303.2	303.2	303.0
16	......	......	......	308.6	306.0	304.3	303.5	303.7	302.8	303.2	303.2	303.0
17	......	......	......	308.5	306.0	304.3	303.5	303.6	302.8	303.2	303.3	303.0
18	......	......	......	308.4	305.9	304.5	303.5	303.6	303.0	303.3	303.3	302.9
19	......	......	......	308.6	305.9	304.4	303.5	303.5	303.0	303.4	303.2	303.0
20	......	......	......	308.5	305.8	304.3	303.5	303.5	303.0	303.4	303.2	303.0
21	......	......	......	308.5	305.7	304.4	303.4	303.5	303.0	303.4	303.3	303.0
22	......	......	......	308.4	305.4	304.4	303.4	303.8	302.8	303.5	303.2	303.0
23	......	......	......	307.9	305.3	304.3	303.3	303.7	303.0	303.5	303.1	303.1
24	......	......	......	307.9	305.2	304.3	303.5	303.7	303.0	303.5	303.1	303.1
25	......	......	......	307.5	305.2	304.2	303.5	303.8	303.0	303.6	303.1	302.5
26	......	......	......	307.5	305.2	304.3	303.4	303.6	303.1	303.6	303.1	303.1
27	......	......	......	307.4	305.0	304.3	303.5	303.7	303.1	303.5	303.0	303.2
28	......	......	......	307.8	304.9	304.2	303.5	303.6	303.0	303.5	303.1	304.7
29	......	......	......	307.8	304.9	304.2	303.5	303.6	303.0	303.5	303.2	304.6
30	......	......	......	307.8	304.8	304.2	303.5	303.5	303.0	303.5	303.2	304.7
31	......	......	......	......	304.7	......	303.7	303.4	......	303.5	......	304.9

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River below Battle Island Dam.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	304.1	303.6	303.4	309.1	305.4	303.9	304.9	303.8	304.0	303.6	304.2	304.1
2	304.2	303.8	303.3	308.9	305.4	303.9	304.8	303.8	303.9	303.8	304.2	304.1
3	304.1	303.9	303.3	308.9	305.3	303.9	304.8	303.9	304.1	303.8	304.2	304.3
4	303.8	303.8	303.3	308.9	305.2	303.7	304.8	303.9	304.2	303.8	304.2	304.6
5	303.7	303.5	303.0	308.9	305.1	303.8	304.7	303.9	304.2	303.8	304.2	304.7
6	303.6	303.5	303.3	308.8	305.0	303.9	304.7	303.6	304.3	303.8	304.3	304.7
7	303.6	303.7	303.2	308.6	304.9	303.9	304.6	303.8	304.2	303.8	304.3	304.7
8	303.8	303.6	303.1	308.5	304.9	304.0	304.5	303.7	304.1	303.6	304.3	304.7
9	303.8	303.6	303.1	308.2	304.9	303.9	304.5	303.7	304.0	303.8	304.3	304.7
10	303.7	303.5	303.2	308.4	304.8	303.8	304.6	303.6	304.0	303.8	304.3	304.4
11	304.0	303.7	303.2	308.1	304.7	303.7	304.4	303.6	304.0	303.8	304.4	304.6
12	303.9	303.2	302.9	308.1	304.7	304.0	304.4	303.6	304.0	303.9	304.2	304.6
13	304.0	303.6	303.4	307.9	304.7	303.9	304.4	303.5	303.9	304.0	304.2	304.5
14	304.1	303.5	303.3	307.7	304.5	303.9	304.4	303.6	303.9	304.1	304.2	304.4
15	304.2	303.5	303.2	307.6	304.7	303.9	304.3	303.8	303.9	304.2	304.2	304.4
16	304.3	303.5	303.2	307.3	304.5	303.9	304.3	304.0	303.9	304.3	304.2	304.3
17	304.3	303.4	303.2	307.2	304.4	304.1	304.4	304.0	304.0	304.2	304.2	304.2
18	304.2	303.4	303.2	307.1	304.4	304.2	304.2	304.0	304.2	304.2	304.2	304.3
19	304.3	303.4	303.1	306.7	304.2	304.5	304.2	304.0	304.0	304.2	304.2	304.5
20	304.3	303.5	304.1	306.7	304.2	304.5	304.2	303.8	304.0	304.1	304.3	304.4
21	304.2	303.5	305.1	306.7	304.1	304.7	304.2	304.0	303.9	304.1	304.1	304.7
22	304.2	303.6	305.4	306.6	304.2	304.9	304.1	304.0	303.9	304.1	304.3	304.7
23	304.2	303.6	305.5	306.3	304.2	304.9	304.0	303.9	303.9	304.2	304.0	304.7
24	304.0	303.7	306.1	306.3	304.2	304.9	304.1	303.8	303.6	304.2	304.0	304.7
25	303.9	303.7	307.3	306.2	304.1	304.8	304.0	303.7	303.9	304.2	304.0	304.8
26	303.8	303.5	308.5	306.0	304.1	305.0	303.9	303.7	303.9	304.2	303.8	304.8
27	303.9	303.5	308.5	305.9	304.1	305.1	303.7	303.6	303.9	304.2	304.0	304.8
28	303.9	303.4	309.0	305.7	303.8	305.9	303.7	303.8	303.9	304.1	304.0	304.9
29	303.9	......	309.0	305.7	304.0	305.0	303.7	303.8	303.9	304.1	304.0	305.1
30	304.1	......	309.0	305.4	303.8	305.0	304.0	303.9	303.9	304.2	304.1	305.1
31	303.9	......	309.1	......	303.8	......	303.9	304.2	......	304.2	......	......

* Gage defective.

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River below Battle Island Dam.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	304.9	304.8	304.3	305.7	304.9	304.0	304.0	303.6	303.4	303.3	303.8	304.4
2	304.9	304.8	304.2	305.7	304.9	304.0	304.2	303.6	303.5	303.3	303.7	304.0
3	305.1	304.7	304.2	305.9	304.8	303.9	304.2	303.6	303.7	303.3	303.7	304.1
4	305.1	304.4	304.4	305.9	304.9	304.0	304.2	303.6	303.5	303.3	303.7	304.1
5	305.1	304.3	304.6	306.1	304.9	304.0	304.3	303.5	303.4	303.3	304.1	304.1
6	305.1	304.3	304.7	306.1	304.6	304.0	304.3	303.9	303.4	303.3	303.9	304.2
7	305.1	304.3	304.7	306.1	304.8	304.0	304.2	303.8	303.4	303.8	303.8	304.3
8	305.2	304.3	304.7	306.0	304.7	304.0	304.1	303.6	303.4	303.5	303.8	304.1
9	304.8	304.2	304.6	306.1	304.7	304.0	304.3	303.7	303.2	303.6	303.7	304.0
10	304.6	304.2	304.6	306.4	304.7	304.0	304.3	303.7	303.3	303.7	303.7	304.1
11	304.6	304.1	304.3	306.5	304.7	304.2	304.3	303.8	303.3	303.6	303.6	304.2
12	304.6	304.3	304.4	306.4	304.7	304.2	304.3	303.6	303.3	303.5	303.8	304.1
13	304.6	304.3	304.3	306.4	304.6	304.1	304.3	303.7	303.2	203.5	303.8	304.2
14	304.3	304.2	304.3	306.4	304.7	304.1	304.2	303.7	303.2	303.3	303.9	304.2
15	304.6	304.1	304.3	306.3	304.6	304.1	304.1	303.7	303.2	303.6	303.9	304.2
16	304.6	304.1	304.2	306.6	304.5	304.1	304.0	303.7	303.1	303.6	303.9	304.4
17	304.6	304.0	304.2	306.6	304.5	304.1	304.0	303.7	303.2	303.6	303.9	304.7
18	304.6	303.9	304.1	306.4	304.5	304.5	304.0	303.6	303.3	303.6	304.0	304.7
19	304.6	304.1	304.2	306.4	304.5	304.7	304.0	303.6	303.3	304.8	304.2	304.7
20	304.6	304.1	304.1	306.2	304.3	304.7	303.9	303.8	303.3	304.8	304.2	304.6
21	304.6	304.1	304.1	306.2	304.2	304.7	303.9	303.7	303.3	304.7	304.2	304.7
22	305.1	304.2	303.9	305.8	304.3	304.7	304.0	303.7	303.3	304.0	304.3	304.6
23	305.3	304.2	303.9	305.7	304.3	304.6	304.2	303.7	303.1	304.0	304.3	304.4
24	305.5	304.2	303.9	305.6	304.3	304.6	304.2	303.6	303.2	304.0	304.4	304.6
25	305.4	304.1	303.9	305.6	304.2	304.7	304.1	303.6	303.1	303.9	304.2	304.6
26	305.4	304.5	304.0	305.5	304.1	304.5	303.8	303.5	303.3	304.0	304.2	304.5
27	305.4	304.4	304.9	305.3	304.1	304.3	303.7	303.7	303.4	304.0	304.3	304.4
28	304.9	304.3	305.3	305.2	304.2	304.3	303.7	303.7	303.4	303.8	304.3	304.3
29	305.1	......	305.5	305.0	304.1	304.2	303.6	303.6	303.4	303.9	304.4	304.3
30	304.9	......	305.7	305.0	304.0	304.2	303.6	303.6	303.3	303.9	304.4	304.2
31	304.9	......	305.7	......	304.0	......	303.6	303.5	......	303.8	......	304.6

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River above Battle Island Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	311.5	310.6	309.4	309.1	310.0	310.0	310.6	310.0
2	......	......	......	......	311.6	310.5	309.4	309.0	310.1	310.0	310.6	310.0
3	......	......	......	......	311.6	310.4	309.4	309.0	310.1	310.1	310.5	310.0
4	......	......	......	......	311.7	310.3	309.4	309.0	310.1	310.1	310.4	309.9
5	......	......	......	......	311.8	310.0	309.3	309.0	310.2	310.1	310.4	310.0
6	......	......	......	......	311.4	309.9	309.2	309.0	310.3	310.2	310.4	310.0
7	......	......	......	......	311.0	309.8	309.2	309.2	310.3	310.1	310.4	310.0
8	......	......	......	......	311.0	309.8	309.2	309.4	310.3	310.1	310.3	310.0
9	......	......	......	......	310.9	309.8	309.1	309.5	310.3	310.1	310.4	310.0
10	......	......	......	......	310.8	309.7	309.1	309.5	310.3	310.1	310.5	310.0
11	......	......	......	312.1	310.8	309.7	309.2	309.6	310.3	310.2	310.4	309.6
12	......	......	......	312.1	310.6	309.7	309.2	309.6	310.3	310.2	310.4	309.5
13	......	......	......	312.0	310.6	309.7	309.2	309.6	310.3	310.3	310.4	309.1
14	......	......	......	312.0	310.5	309.6	309.2	309.6	310.3	310.3	310.4	309.1
15	......	......	......	312.0	310.5	309.6	309.2	309.8	310.3	310.1	310.4	309.1
16	......	......	......	311.9	310.5	309.6	309.2	309.3	310.3	310.1	310.3	309.1
17	......	......	......	311.9	310.5	309.6	309.2	309.1	310.1	310.3	310.3	309.1
18	......	......	......	311.9	310.4	309.5	309.2	309.1	310.0	310.3	310.4	309.3
19	......	......	......	311.7	310.3	309.5	†	309.1	310.0	310.4	310.3	309.3
20	......	......	......	311.7	310.0	309.4	†	309.3	310.0	310.5	310.3	309.3
21	......	......	......	311.7	310.1	309.4	†	309.3	310.0	310.6	310.4	309.5
22	......	......	......	311.8	310.4	309.4	†	309.7	309.9	310.6	310.1	309.5
23	......	......	......	311.6	310.4	309.4	†	309.7	310.0	310.6	310.2	309.7
24	......	......	......	311.6	310.4	309.5	†	309.7	310.0	310.6	310.2	309.7
25	......	......	......	311.4	310.3	309.4	†	309.6	309.9	310.6	310.1	309.4
26	......	......	......	311.4	310.3	309.3	308.8	309.7	310.0	310.6	310.1	309.8
27	......	......	......	311.6	310.3	309.3	308.7	309.7	310.0	310.5	310.0	310.0
28	......	......	......	311.5	310.3	309.3	308.7	309.7	310.0	310.5	310.0	310.6
29	......	......	......	311.6	310.5	309.3	308.7	309.7	310.0	310.5	310.0	310.7
30	......	......	......	311.6	310.5	309.3	308.8	309.7	310.1	310.5	310.0	310.8
31	......	......	......	......	310.6	......	309.1	309.8	......	310.7	......	311.0

* Gage defective. † Gage out of use.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River above Battle Island Dam.

DAY. 1905.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	310.8	310.2	310.1	313.1	311.3	310.1	311.0	310.0	310.3	309.7	310.4	310.4
2	310.9	310.0	310.0	313.0	311.3	310.1	310.9	309.9	310.2	310.0	310.4	310.4
3	310.8	310.2	310.0	313.0	311.2	310.1	310.9	309.9	310.2	310.0	310.4	310.6
4	310.6	310.2	310.0	313.0	311.2	310.0	310.9	309.9	310.4	310.0	310.4	310.7
5	310.6	310.1	309.9	313.0	311.1	310.1	310.8	309.9	310.4	310.0	310.4	310.8
6	310.5	310.4	309.9	312.9	310.9	310.1	310.8	310.0	310.4	310.0	310.5	310.9
7	310.5	310.4	310.0	312.9	311.0	310.1	310.7	310.0	310.3	310.0	310.5	310.9
8	310.6	310.5	310.0	312.9	311.0	310.2	310.6	309.9	310.3	309.7	310.5	310.9
9	310.6	310.5	310.0	312.8	311.0	310.1	310.6	309.8	310.1	309.9	310.5	310.9
10	310.7	310.5	310.0	312.8	311.0	310.1	310.7	309.7	310.0	310.0	310.6	310.8
11	310.7	310.5	310.0	312.6	310.9	310.0	310.6	309.7	310.0	310.0	310.6	310.9
12	310.8	310.3	309.7	312.6	310.9	310.1	310.6	309.8	310.0	310.0	310.5	310.9
13	310.7	310.6	310.2	312.6	310.9	310.2	310.6	309.7	310.1	310.1	310.4	310.9
14	310.7	310.5	310.1	312.5	310.8	310.2	310.6	310.0	310.1	310.2	310.4	310.8
15	310.5	310.5	310.0	312.4	311.0	310.1	310.5	310.1	310.0	310.4	310.4	310.6
16	310.7	310.5	310.0	312.2	310.8	310.1	310.5	310.2	309.9	310.5	310.4	310.6
17	310.6	310.4	310.0	312.2	310.8	310.4	310.6	310.2	310.0	310.5	310.4	310.4
18	310.7	310.4	310.0	312.1	310.7	310.5	310.4	310.2	310.1	310.4	310.4	310.6
19	310.6	310.1	309.9	312.0	310.6	310.7	310.4	310.2	310.2	310.4	310.3	310.6
20	310.8	310.3	310.7	312.0	310.5	310.8	310.3	310.0	310.2	310.3	310.4	310.6
21	310.7	310.2	311.0	312.0	310.4	310.9	310.2	310.2	310.0	310.3	310.4	310.7
22	310.4	310.3	311.6	311.9	310.5	311.0	310.2	310.1	310.0	310.3	310.3	311.0
23	310.6	310.3	311.6	311.8	310.5	311.0	310.1	310.0	310.0	310.4	310.3	311.0
24	310.4	310.2	311.6	311.8	310.5	311.0	310.2	310.0	309.7	310.4	310.3	310.9
25	310.3	310.2	311.7	311.8	310.4	310.9	310.0	309.9	310.0	310.4	310.3	311.0
26	310.2	310.1	312.4	311.7	310.4	311.1	310.0	309.8	310.1	310.4	310.2	311.0
27	310.4	310.2	313.0	311.6	310.3	311.2	309.9	309.7	310.1	310.4	310.5	310.9
28	310.4	310.1	313.0	311.6	310.0	311.1	309.9	310.0	310.1	310.4	310.4	311.0
29	310.3	.....	313.2	311.6	310.2	311.1	309.9	310.0	310.1	310.3	310.3	311.1
30	310.5	.....	313.2	311.3	310.1	311.1	310.0	310.1	309.9	310.4	310.4	311.1
31	310.4	......	313.1	......	310.1	......	310.1	310.4	......	310.4	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River above Battle Island Dam.

DAY. 1906.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	311.1	310.8	310.5	311.5	310.9	310.4	310.3	309.8	309.4	309.5	310.0	310.6
2	311.1	310.8	310.5	311.7	310.8	310.4	310.5	309.6	309.4	309.5	309.9	310.3
3	311.2	310.7	310.5	311.5	311.0	310.3	310.5	309.6	309.8	309.5	309.9	310.4
4	311.2	310.3	310.8	311.5	311.0	310.4	310.5	309.6	309.7	309.5	310.0	310.4
5	311.2	310.2	310.9	311.6	311.1	310.4	310.6	309.5	309.6	309.5	310.4	310.5
6	311.2	310.2	310.9	311.6	310.9	310.4	310.4	310.0	309.4	309.5	310.2	310.6
7	311.0	310.3	310.9	311.6	311.0	310.5	310.3	309.9	309.4	309.5	310.0	310.6
8	311.1	310.4	310.9	311.5	310.9	310.5	310.3	309.6	309.4	309.8	309.9	310.4
9	311.0	310.3	310.8	311.6	310.8	310.6	310.3	309.8	309.3	309.8	309.9	310.2
10	310.8	310.3	310.8	311.9	310.8	310.5	310.3	309.8	309.5	309.8	309.9	310.5
11	310.7	310.0	310.6	311.9	310.9	310.6	310.3	309.9	309.5	309.7	309.9	310.5
12	310.8	310.2	310.7	311.9	310.9	310.6	310.3	309.8	309.5	309.6	310.1	310.4
13	310.8	310.2	310.7	311.9	310.9	310.5	310.3	310.0	309.4	309.6	310.1	310.5
14	310.5	310.1	310.7	311.8	311.0	310.4	310.3	309.8	309.4	309.6	310.1	310.5
15	310.6	310.1	310.6	311.7	310.9	310.4	310.0	309.8	309.4	309.7	310.1	310.5
16	310.8	310.0	310.5	311.9	310.7	310.4	310.1	309.8	309.3	309.7	310.1	310.6
17	310.8	310.0	310.5	311.9	310.6	310.6	310.1	309.7	309.5	309.7	310.1	311.0
18	310.8	309.9	310.2	311.9	310.6	310.7	310.1	309.7	309.5	309.7	310.2	310.9
19	310.8	310.2	310.3	311.8	310.6	310.8	310.1	309.3	309.5	309.8	310.4	310.8
20	310.8	310.2	310.2	311.7	310.4	310.8	310.0	309.5	309.5	309.8	310.4	310.7
21	310.7	310.2	310.1	311.7	310.7	310.8	310.0	309.7	309.5	309.9	310.4	310.9
22	311.1	310.3	310.1	311.5	310.6	310.8	310.0	309.7	309.4	310.2	310.5	310.8
23	311.3	310.5	310.1	311.6	310.6	310.7	310.2	309.7	309.5	310.2	310.5	310.7
24	311.4	310.5	310.1	311.4	310.5	310.6	310.1	309.7	309.5	310.1	310.6	310.8
25	311.3	310.4	310.0	311.3	310.4	310.7	310.1	309.6	309.5	310.0	310.5	310.6
26	311.2	310.8	310.1	311.3	310.4	310.7	309.9	309.6	309.5	310.0	310.6	310.6
27	311.2	310.7	310.7	311.2	310.3	310.5	309.7	309.8	309.5	310.0	310.6	310.6
28	311.0	310.6	311.1	311.1	310.5	310.6	309.7	309.6	309.5	310.0	310.6	310.6
29	311.1	......	311.4	310.9	310.5	310.5	309.7	309.6	309.5	310.1	310.6	310.6
30	311.0	......	311.5	310.9	310.4	310.5	309.8	309.7	309.4	310.1	310.6	310.4
31	310.9	......	311.5	......	310.4	......	309.8	309.6	......	310.0	......	310.9

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River at Mouth of Black, or Waterhouse Creek, Fulton, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1						310.7	309.6	309.5	310.1	310.3	310.9	310.6
2					312.5	310.7	309.6	309.5	310.1		310.8	310.3
3					312.5	310.7		309.5	310.2	310.7	310.8	310.5
4					312.4	310.6	309.5	309.5		310.4	310.8	
5					312.3		309.5	309.5	310.7	310.5	310.8	310.4
6					312.2	310.6	309.4	309.5	310.6	310.5		310.4
7					312.1	310.5	309.4		310.5	310.4	310.8	310.3
8						310.4	309.3	310.0	310.5	310.4	310.8	310.4
9				313.4	312.0	310.5	309.4	309.6	310.5		310.6	*
10					311.9	310.5		309.5	310.5	310.6	310.7	
11				313.5	311.8	310.5	309.4	309.7		310.5	310.6	
12				313.4	311.6		309.4	309.6	310.6	310.6	310.6	
13				313.5	311.5	310.4	309.4	309.6	310.4	310.7		
14				313.4	311.4	310.3	309.3		310.3	310.7	310.8	
15				313.3		310.3	309.3	309.9	310.4	310.6	310.6	
16				313.2	311.4	310.3	309.3	309.9	310.3		310.6	
17					311.3	310.2		309.8	310.2	310.8	310.6	
18				313.2	311.2	310.1	309.5	309.7		310.9	310.6	
19				313.1	311.2		309.1	309.6	310.5	310.6	310.6	
20				313.0	311.2	310.1	308.9	309.8	310.3	310.6		
21				312.9	311.2	310.0	309.0		310.3	310.6	310.7	
22				312.8		310.0	308.9	309.9	310.2	310.8	310.5	
23				312.7	311.2	309.9	308.9	310.0	310.3		310.5	
24					311.2	309.9		309.9	310.2	311.0	310.6	
25				312.6	311.1	309.9	309.2	309.9		310.9	310.6	
26				312.6	311.1		309.2	309.9	310.7	310.8	310.6	
27				312.5	311.1	309.8	309.1	309.9	310.6	310.8		
28				312.6	311.1	309.8	309.3		310.3	310.8	310.6	
29				312.7		309.7	309.4	310.5	310.3	310.9	310.7	
30				312.6	310.9	309.6	309.3	310.1	310.3		310.6	
31					310.8			310.1		311.1		

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River at Mouth of Black, or Waterhouse Creek, Fulton, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1						310.8	311.8	310.6	310.4		310.6	310.7
2						310.8		310.4	310.5	310.4	310.6	310.8
3						310.6	311.8	310.4		310.5		
4							311.6	310.4		310.4		311.4
5						310.6	311.6	310.4	310.7	310.5		311.1
6						310.6	311.4		310.5	310.5		311.2
7						310.4	311.4	310.6	310.4	310.5		311.2
8						310.4	311.2	310.4	310.5			311.3
9						310.4		310.2	310.6	310.6		311.3
10						310.4	311.2	310.0		310.7		
11					311.4		311.2	310.0	310.7	310.7		
12					311.4	310.6	311.2	310.0	310.8	310.6		
13					311.4	310.6	311.4		310.7	310.6		
14						310.6	311.4	310.2	310.6	310.8	310.9	311.3
15					311.4	310.8	311.4	310.4	310.7		310.8	311.2
16					311.4	310.8		310.6	310.5	310.8	310.9	311.4
17					311.2	311.0	311.2	310.6		310.9	310.8	
18					311.2		311.2	310.6	310.5	310.7		311.5
19					311.2	311.2	311.2	310.6	310.3	310.9	310.9	311.2
20					311.2	311.2	311.0		310.5	310.8	310.7	311.0
21						311.4	311.0	310.6	310.5	310.7	310.7	311.2
22					311.0	311.6	311.0	310.4	310.5		310.8	311.5
23					310.8	311.6		310.4	310.4	310.8	310.8	
24					310.8	311.8	311.0	310.4		310.8	310.7	
25					310.8		310.8	310.4	310.6	310.8		
26						312.0	310.8	310.2	310.5	310.7		
27						312.0	310.8		310.4	310.7	310.6	311.4
28						311.8	310.6	310.2	310.4	310.7		311.3
29						311.8	310.6	310.2	310.4		310.6	
30						311.8		310.6	310.5	310.8		
31							310.6	310.1		310.8		

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* Discontinued on account of ice.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River at Mouth of Black, or Waterhouse Creek, Fulton, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	......	311.7	......	......	......	310.5	......	309.8	309.5	309.5	310.1	310.8
2	......	311.4	......	......	......	......	310.4	309.8	......	309.5	310.1	......
3	311.5	......	......	......	......	......	310.4	......	......	309.5	......	310.8
4	......	......	......	......	......	310.4	......	309.8	309.6	309.4	......	310.8
5	311.7	......	......	......	......	310.4	310.6	......	309.5	309.5	310 1	310.6
6	311.7	......	......	......	......	310.4	310.5	310.2	309.5	309.6	310.0	310.6
7	......	......	......	......	......	310.4	310.4	309.9	309.5	......	310.0	310.7
8	311.8	......	......	......	......	310.4	......	309.9	309.5	309.7	310.0	......
9	312.1	......	......	......	......	......	......	309.9	......	309.7	......	......
10	312.5	......	......	......	......	......	......	......	309.8	309.8	......	311.6
11	312.5	......	......	......	......	......	310.5	......	309 5	309.8	......	311.6
12	312.6	......	......	......	......	......	310.5	......	309.5	309.6	310.1	311.6
13	311.9	......	......	......	......	......	310.5	309.9	309.5	......	310.1	311.6
14	......	......	......	......	......	......	......	......	309.4	......	310.1	......
15	311.8	......	......	......	......	310.5	......	309.8	309.5	310.1	310.2	......
16	311.6	311.6	......	......	311.0	......	......	309.9	......	309.5	310.2	......
17	311.6	......	......	......	311 0	......	310.3	309.9	......	309.5	310.3	311.7
18	311.6	......	......	......	310.9	311.0	......	309.6	......	309.5	......	311.5
19	......	......	......	......	310.9	311.0	310.1	......	309.5	309.6	310.5	311.5
20	......	......	......	......	......	311.0	310.0	......	309.5	......	310.6	311.5
21	......	......	......	......	311.0	311.0	310.0	......	309.5	......	310.6	311.6
22	312.1	......	......	......	......	311.0	......	......	309.5	310.1	310.6	311.4
23	311.7	......	......	......	......	311.0	......	......	......	310.1	310.6	......
24	311.9	......	......	......	......	......	......	......	309.6	310.1	310.6	311.7
25	311.8	......	......	......	......	......	309.9	......	309.5	310.1	......	......
26	......	......	......	......	310.6	310.7	309.9	......	309.5	310.2	310.8	......
27	......	......	......	......	......	310.7	309.9	309.5	309.5	......	310.8	311.9
28	......	......	......	......	310.8	310.5	......	309.6	309.5	......	310.8	311.7
29	......	......	......	......	......	310.4	......	309.5	309.5	310.3	310.8	311.5
30	311.6	......	......	......	......	310.5	......	309.6	......	310.4	310.7	......
31	311.8	......	......	......	310.5	......	......	309.5	......	310.4	......	311.5

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River near Manhattan Villa, below Fulton, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	......	310.9	309.5	309.3	310.0	310.1	310.6	310.0
2	......	......	......	......	312.6	310.8	309.5	309.3	309.9	......	310.5	310.1
3	......	......	......	......	312.5	310.8	......	309.3	310.0	310.4	310.6	310.1
4	......	......	......	......	312.5	310.7	309.4	309.3	......	310.1	310.6	......
5	......	......	......	......	312.4	......	309.4	309.4	310.5	310.2	310.6	310.1
6	......	......	......	......	312.3	310.7	309.3	309.4	310.3	310.3	......	310.1
7	......	......	......	......	312.3	310 6	309.4	......	310.3	310.1	310.6	310.1
8	......	......	......	......	......	310.4	309 3	309.9	310.2	310.1	310.6	210.1
9	......	......	......	313.5	312.1	310.4	309 2	309.4	310.2	......	310.4	310.1
10	......	......	......	......	312.0	310.5	......	309.4	310.2	310.3	310.4	310.1
11	......	......	......	313.6	311.9	310.5	309.2	309.5	......	310.3	310.3	*
12	......	......	......	313.5	311.7	......	309.2	309.4	310.3	310.3	310.3	......
13	......	......	......	313.5	311.6	310.4	309.2	309.4	310.1	310.4	......	......
14	......	......	......	313.5	311.5	310.2	309.2	......	309.9	310.4	310 6	......
15	......	......	......	313.4	......	310.2	309.2	309.7	310.1	310.3	310.3	......
16	......	......	......	313.3	311.4	310.2	309.3	309.7	309.9	......	310.3	......
17	......	......	......	......	311.3	310.1	......	309.6	309.9	310.6	310.3	......
18	......	......	......	313.3	311.3	310.1	309.5	309.7	......	310.7	310.3	......
19	......	......	......	313.2	311.3	......	309.1	309.5	310.3	310.3	310.3	......
20	......	......	......	313.1	311.2	310.0	308.9	309.6	309.9	310.4	......	......
21	......	......	......	313.0	311.2	309.9	309.0	......	310.0	310.4	310.5	......
22	......	......	......	313.0	......	309.9	308.9	309.7	309.9	310.6	310.3	......
23	......	......	......	312.8	311.2	309.8	308.9	309 7	310.0	......	310.3	......
24	......	......	......	......	311.2	309.8	......	309.7	309.9	310.9	310.3	......
25	......	......	......	312.7	311.1	309.8	309.1	309.6	......	310.7	310.4	......
26	......	......	......	312.7	311.1	......	309.0	309.7	310.4	310.6	310.4	......
27	......	......	......	312.7	311.1	309.7	309.0	309.7	310.1	310.6	......	......
28	......	......	......	312.6	311.1	309.5	309.1	......	310.0	310.6	310.5	......
29	......	......	......	312.8	......	309.6	309.2	310.3	310.0	310.6	310.4	......
30	......	......	......	312.7	311.0	309.6	309.1	309.8	310.0	......	310.4	......
31	......	......	......	......	310.9	......	......	309.9	......	310.9	......	......

* Discontinued on account of ice.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River above Lower Fulton Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	......	334.4	333.1	333.1	332.6	332.3	333.2	332.0
2	......	......	......	......	335.9	334.3	333.1	332.8	332.7	......	333.3	332.0
3	......	......	......	....	335.8	334.3	......	332.8	332.6	332.8	332.9	332.2
4	......	......	......	......	335.8	334.3	333.1	332.7	......	332.3	332.8	......
5	......	......	......	......	335.7	......	333.1	332.7	332.6	332.3	333.0	332.2
6	......	......	......	......	335.7	334.2	333.1	332.5	331.2	332.1	......	332.2
7	......	......	......	......	335.6	334.0	333.2	......	331.8	332.2	333.0	332.2
8	......	......	......	......	......	333.9	333.0	332.7	332.0	332.2	333.0	329.3
9	......	......	......	336.5	335.5	334.0	332.8	332.4	332.1	......	332.9	329.5
10	......	......	......	......	335.3	334.0	......	332.5	332.2	332.6	332.9	......
11	......	......	......	336.6	335.2	334.0	332.9	332.6	......	332.3	332.7	......
12	......	......	......	336.6	335.1	......	333.0	332.3	333.1	332.4	332.7	......
13	......	......	......	336.5	335.0	334.1	332.9	332.2	333.0	332.5	......	......
14	......	......	......	336.7	334.9	334.0	332.9	......	332.5	332.5	332.9	....
15	......	......	......	336.5	......	333.8	332.8	332.7	332.0	332.4	332.5	331.2
16	......	......	......	336.4	334.8	333.8	332.9	332.9	332.1	......	332.5	331.3
17	......	......	......	......	334.7	333.7	......	332.6	332.0	333.0	332.5	331.2
18	......	......	......	336.4	334.7	333.6	332.9	332.5	.....	332.6	332.5	......
19	......	......	......	336.4	334.8	......	332.7	332.5	332.8	332.6	332.5	331.1
20	......	......	......	336.2	334.7	333.6	332.8	332.5	332.0	332.7	......	330.9
21	......	......	......	336.1	334.7	333.5	332.6	......	332.0	332.8	332.9	330.6
22	......	......	......	336.1	......	333.4	332.8	333.2	332.0	332.8	332.4	330.5
23	......	......	......	336.0	334.8	333.4	332.6	333.2	332.0	.....	332.4	330.9
24	......	......	......	......	334.7	333.4	......	333.2	332.1	333.3	332.4	331.6
25	......	......	......	336.0	334.6	333.4	332.9	333.2	......	333.0	332.3	......
26	......	......	......	335.9	334.6	......	332.5	333.2	332.3	333.0	332.5	......
27	......	......	......	335.9	334.5	333.4	332.4	332.9	332.2	332.9	......	332.0
28	......	......	......	335.9	334.5	333.3	332.5	......	332.2	332.9	332.4	332.8
29	......	......	......	335.9	......	333.3	332.5	333.2	332.2	333.0	332.4	332.9
30	......	......	......	335.9	334.5	333.3	332.5	332.8	332.2	......	332.4	333.1
31	......	......	......	......	334.5	......	......	332.8	......	333.3	......	333.0

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River above Lower Fulton Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	333.5	332.8	332.2	336.3	334.4	......	334.2	332.7	332.8	......	333.1	333.1
2	333.5	332.8	......	.....	334.3	......	......	332.7	332.7	332.8	333.0	333.2
3	333.1	332.7	332.0	336.2	334.2	332.4	334.2	332.7	......	332.4	333.1	......
4	332.6	332.5	332.2	336.2	334.1	......	334.3	332.7	......	332.5	333.1	333.7
5	333.1	......	332.1	336.2	334.0	332.5	334.3	332.4	333.0	332.5	......	333.7
6	333.0	332.7	......	336.1	333.9	332.6	333.9	......	333.0	332.4	333.5	333.6
7	332.4	332.7	......	336.1	......	332.5	333.9	332.6	332.9	......	333.4	333.7
8	......	332.6	......	336.0	334.0	332.9	333.8	332.4	332.8	......	333.4	333.8
9	333.0	332.6	......	......	334.0	333.0	......	332.4	332.8	......	333.3	333.8
10	333.1	332.6	332.2	336.0	333.9	333.0	333.8	332.3	......	......	333.3	......
11	333.1	332.5	......	335.9	333.9	......	333.8	332.2	333.3	......	333.3	333.6
12	333.1	......	......	335.8	333.9	332.7	333.7	332.2	333.3	......	......	......
13	333.3	332.7	332.2	335.7	333.8	332.8	333.7	......	333.2	......	333.5	333.8
14	......	332.4	332.0	335.7	......	332.8	333.5	332.4	333.0	......	......	333.8
15	......	332.4	332.0	335.6	334.0	332.9	333.5	332.4	333.0	......	333.4	333.6
16	333.3	332.3	332.2	.....	333.8	333.0	.....	332.5	333.1	333.4	333.4	333.4
17	333.2	332.4	332.0	335.2	333.6	333.2	333.4	332.5	......	333.4	333.3	......
18	333.2	332.5	332.1	335.3	333.7	......	333.3	332.7	333.2	333.2	......	333.4
19	333.2	......	......	......	333.6	333.2	333.2	332.7	333.2	333.2	......	333.3
20	333.3	332.3	333.1	335.2	333.6	333.5	333.1	......	333.3	......	333.3	333.3
21	333.3	332.3	333.5	334.9	......	333.7	333.1	332.7	333.2	333.1	333.1	333.3
22	......	......	333.6	......	333.5	334.2	332.9	332.7	333.1	......	333.1	333.7
23	333.3	332.3	334.0	......	333.3	334.2	......	332.7	333.1	333.4	333.0	......
24	333.0	332.3	334.2	.....	333.1	334.0	332.9	332.5	......	......	333.0	......
25	332.7	332.1	334.7	334.7	333.1	.....	333.0	332.5	333.0	333.1	......	......
26	332.6	......	......	334.7	......	334.4	332.9	332.4	332.4	333.2	......	......
27	332.8	332.4	336.1	......	......	334.2	332.8	......	332.3	333.2	332.9	333.8
28	332.9	......	336.2	334.6	......	334.3	332.7	......	332.5	333.1	333.0	333.8
29	......	......	336.4	......	......	334.3	332.7	......	332.4	......	333.0	......
30	333.0	......	336.4	...	......	334.3	......	......	332.3	333.1	....	......
31	332.9	......	......	......	......	......	333.2	......	......	333.2	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River above Lower Fulton Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1		333.9				333.3		332.0			332.7	333.4
2		333.7		334.8			333.2	332.1			332.5	
3	334.1	333.1		334.8			333.1	332.1		331.7		333.4
4					333.9	333.3		332.2	331.0	331.6		333.0
5	334.1			334.8	334.0	333.3	333.3		331.1	331.6	332.7	332.9
6	334.1			334.8		333.3	333.2	332.6	331.5	331.0	332.5	333.0
7			333.8	334.8	334.1	332.9	333.1	332.4	330.1		332.7	333.3
8	334.0					332.9		332.5	330.1	332.5	332.6	
9	333.6			334.8	334.0		333.3	332.3		332.3		
10	334.1			335.2	333.9				332.3	332.3		333.7
11	333.5		333.6	335.2	333.7		333.3		331.9	332.1		332.3
12	333.7			335.1	333.9		333.1		331.9		332.8	332.3
13	333.6		333.6				333.1	332.4	332.0		332.7	332.3
14					333.9				331.5		332.8	
15	333.7		333.4			333.3		332.5	332.7	332.3	332.7	
16	333.7	332.8		335.1	333.7			332.5		331.7	332.8	
17	333.6	333.0		335.0	333.6		332.9	332.5	331.7	332.1	333.0	333.8
18	333.7				333.5	333.6		332.5		332.2		333.7
19	333.9				333.5	333.6			381.9	332.1	333.1	333.7
20						333.6	332.7		332.2		333.1	333.7
21			333.4		333.6	333.6			332.0		333.3	333.7
22	334.1					333.6			332.0	332.7	333.3	333.7
23	334.1		333.0		333.3	333.5				332.5	333.3	
24	334.2							332.4	332.4	332.5	333.3	333.3
25	334.2						332.5		331.5	332.5		
26		333.6		334.7	333.1	333.3	332.4		331.0	332.5	333.5	
27			333.6			333.3	332.4	332.7	331.6	332.6	333.4	333.2
28		333.4	334.3	334.2	333.3	333.2		332.1	331.8		333.4	333.2
29			334.3			333.1		332.3		332.7	333.4	333.3
30	333.8			334.1		333.1	332.6	332.0		332.6	333.4	
31	334.0		334.6		333.2			332.6		332.7		333.7

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River above Oswego Falls Dam.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1						349.7	348.6	348.0	347.3	347.5	347.6	347.0
2					350.8	349.7	348.5	347.5	347.5		347.7	347.0
3					350.8	349.7		347.6	347.3	347.7	347.8	347.2
4					350.7	349.7	348.5	347.5		347.4	347.9	
5					350.7		348.5	347.4	348.1	347.5	347.7	347.2
6					350.6	349.7	348.5	347.5	347.6	347.4		347.2
7					350.6	349.6	348.6		347.5	347.4	348.0	347.1
8						349.6	348.5	347.9	347.6	347.4	347.7	347.0
9				351.4	350.5	349.6	348.5	347.2	347.7		347.6	
10					350.3	349.6		347.1	347.5	347.2	347.6	
11				351.4	350.3	349.5	348.4	347.0		347.1	347.6	
12				351.4	350.2		348.3	347.2	347.5	347.1	347.6	
13				351.4	350.2	349.4	348.3	347.3	347.5	347.6		
14				351.4	350.1	349.3	348.3		347.6	347.1	347.6	
15				351.3		349.3	348.3	348.6	347.7	347.3	347.1	346.4
16				351.3	350.2	349.2	348.5	347.5	347.5		347.1	346.5
17					350.2	349.1		347.2	347.6	347.8	347.1	346.4
18				351.2	350.1	349.1	348.5	348.9		347.5	347.1	
19				351.2	350.1		348.0	348.8	347.7	347.4	347.0	347.2
20				351.1	350.0	349.2	347.9	348.8	347.5	347.3		347.0
21				351.0	350.0	349.0	347.9		347.5	347.4	347.6	346.6
22				351.1		349.0	348.0	349.0	347.6	347.7	347.0	346.5
23				351.1	350.1	348.9	347.9	349.1	347.5		347.1	347.0
24					350.0	349.0		348.9	347.5	348.3	347.1	347.1
25				350.9	350.0	348.9	348.4	347.2		347.8	347.1	
26				350.9	350.0		348.8	347.3	347.5	347.7	347.3	
27				350.9	350.0	348.7	347.5	347.5	347.4	347.8		346.6
28				350.9	349.9	348.7	347.3		347.5	347.7	347.3	348.1
29				351.0		348.6	347.6	347.4	347.4	347.9	347.1	348.3
30				350.9	349.8	348.6	347.3	347.3	347.5		347.1	348.6
31					349.8			347.3		348.1		348.8

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* Gage defective.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River above Oswego Falls Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	348.4	347.6	346.5	351.0	349.5	347.6	349.3	347.6	347.9	......	347.9	348 2
2	348.4	......	346.8	......	349.4	347.5	......	347.6	317.8	347.3	347.8	348.1
3	348.2	347.5	346.5	350.8	349.3	347.3	349 2	347.4	......	347.2	348.4	......
4	347.6	347.8	346.8	350.9	349.2	......	349.2	347.5	......	347.2	......	348.9
5	348.3	......	......	350.9	349.1	347.6	349 2	347.4	348.0	347.2	......	349.0
6	348.2	347.9	......	351.1	349.0	348.0	349.0	......	347.9	347.0	......	349.0
7	348.2	348.1	......	351.0	......	347.6	348.8	347.6	348 0	......	......	349.1
8	......	347.4	......	350.8	349.1	347.8	318.7	347.3	347.9	......	......	349.1
9	348.1	347.1	346.7	......	349.1	347.9	......	347.0	347.9	......	......	349.0
10	348.1	347.0	347.0	350.8	349.1	347.9	348.7	346.9	......	......	348.3	......
11	348.1	346.9	346.9	350.7	349.1	......	348.7	346.9	348 1	......	348.7	......
12	348.3	......	......	350 6	349.1	347.6	348.6	347.0	347.8	......	......	......
13	348.3	347.1	346.9	350.6	349.1	347.7	348.6	......	347.7	......	......	348.2
14	......	347.7	346.9	350.5	......	347.7	348.5	347.6	347.5	......	348.5	348 6
15	......	347.4	346.8	350 4	349.1	347.9	348.9	347.3	347.4	......	348.4	348.7
16	348 2	346.8	347.0	......	349.0	347.9	......	347.4	347.6	348.1	348.3	348.5
17	348.2	347.0	346.9	349.9	348.8	348.0	348.8	347.5	......	348 2	348.2	......
18	348.2	347.2	346 8	350.1	349 0	......	348.8	347.6	347.7	348.3	348.4	348.5
19	348.2	......	......	......	348.9	348.1	348.6	347 8	347.7	348.2	......	348.5
20	348 2	346.8	348 2	350.0	348.9	348.2	348.3	......	347.7	......	318.2	348.4
21	348.2	346.6	348.8	349.9	......	348.4	348.1	347.5	347 6	348.3	348.2	348.8
22	......	......	318.8	......	348.5	349.5	347.9	347.4	347.5	......	348.3	349.0
23	348.4	346.9	349.2	......	348.4	349.8	......	347.5	347.4	350.0	348.0	......
24	348.1	346.8	319.2	......	348 2	349.7	347.9	347.3	......	349.7	347.9	......
25	347.8	346.7	349.8	349.4	347.8	......	347.7	347.1	347.8	350.0	......	......
26	347.7	......	......	349.4	347.8	319.4	347.6	347.1	347.6	349.9	......	......
27	347 6	346.8	350.3	......	347.8	349.3	347.4	......	347.5	348.7	347.7	349.0
28	347.5	......	350.7	349 3	......	349.2	347.2	346.9	347.2	348.7	347.7	349 0
29	......	......	351.0	......	347.8	349.2	347.0	......	347.3	......	347.8	......
30	348.0	......	351.2	......	347.7	349.2	......	......	347.5	348.7	......	......
31	347.5	......	......	......	347.7	......	347.6	......	......	348.8	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River above Oswego Falls Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	......	348.9	......	......	......	348.4	......	347.4	......	347.6	......	348.6
2	......	348.6	......	349.9	......	......	348.2	347.2	......	......	348.0	......
3	348.5	348 5	......	349.9	......	......	......	......	......	......	......	348.6
4	......	......	......	......	348.7	348 3	......	......	347.3	347.5	......	348.6
5	349.4	......	......	349.8	......	348.3	348.5	......	347.4	......	347.4	348.4
6	349.5	......	......	349.9	......	348 1	348 5	347.0	347.4	......	347.5	348 5
7	......	......	349.1	349.8	349.4	348.1	348.5	347.2	347.6	......	347.5	348.4
8	349.4	......	......	......	......	348 1	......	347 1	347.6	347.1	347 3	......
9	348.8	......	......	350.0	349 3	......	......	347.3	......	347.1	......	......
10	349.3	......	......	350.2	349.1	......	......	......	347 3	......	......	348.1
11	348.7	......	348.9	350.2	348 8	......	348.5	......	347.4	......	......	348.3
12	348.7	......	......	350.1	348.8	......	......	......	347.6	......	347.7	348.4
13	349.0	......	348.9	......	......	......	348.5	347.3	347 7	......	347.8	348.2
14	......	......	......	......	349 4	......	......	......	347.7	......	347.6	......
15	348.7	......	348.7	......	......	......	......	317.2	347.6	347.1	317.7	......
16	348 8	347.9	......	350 2	349.2	......	......	347.1	......	347.1	347.8	......
17	348.7	347.7	......	350.1	349.2	......	348.3	317.1	347.2	347.6	347.8	349.2
18	348.7	......	......	......	349.1	......	......	347.2	......	347.5	......	349.1
19	348.7	......	......	......	349.1	318.1	......	......	317.6	......	348.9	349 2
20	......	......	......	......	......	......	347.9	......	347.6	......	348.7	349 2
21	......	......	348.3	......	349.1	348.2	......	......	347.0	......	348 3	348.8
22	349 5	......	......	......	......	348 6	......	......	347.9	347.0	348.6	349.0
23	349.2	......	348.4	......	......	348.9	......	......	......	......	348.6	......
24	349.3	......	......	......	......	......	......	......	347.6	347.4	348.5	348.5
25	......	......	......	......	......	......	347.1	......	......	347 6	......	......
26	......	348.9	......	349.6	348.4	348.7	347.3	347.3	......	347.6	348 9	348.4
27	......	348.7	348.8	349 6	......	348.7	347.3	347 2	......	......	348.7	348.4
28	......	......	349 4	......	348.6	348 4	......	347.4	347 7	......	348.8	348.6
29	......	......	349.5	......	......	348.3	......	347 5	347.7	347.9	348.7	348.6
30	......	......	......	349.4	......	348.3	......	347.4	......	347 9	348.6	......
31	349.0	......	349.7	......	348.6	......	......	347.4	......	347.8	......	349.0

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River at Mouth of Ox Creek.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1					353.5	351.2	349.4	348.9	348.1	348.3	348.9	*
2					353.5	351.2	349.4	348.6	348.0	....	348.8	....
3					353.3	351.1	....	348.6	348.1	348.9	348.9	....
4					353.2	351.0	349.5	348.5	..	348.2	348.9	....
5					353.1	....	349.4	348.5	348.9	348.2	348.8	....
6					353.0	350.9	349.4	348.6	348.2	348.2	....	....
7					352.9	350.9	349.3	....	348.1	348.0	349.2	....
8					352.9	350.8	349.3	348.7	348.0	348.1	348.6	....
9					352.7	350.8	349.3	348.3	348.1	....	348.5	....
10					352.5	350.7	....	348.3	348.1	348.4	348.5	....
11				....	352.3	350.7	349.1	348.1		348.3	348.5	....
12				354.3	352.1	....	349.1	348.0	348.0	348.3	348.6	....
13				354.3	352.0	350.5	349.1	348.1	348.1	348.4	....	....
14				354.3	351.9	350.4	349.0	....	348.1	348.5	348.5	....
15				354.2	351.9	350.3	349.0	348.7	348.1	348.5	348.3	....
16				354.2	351.8	350.3	349.2	348.3	348.0	..	348.3	....
17				354.1	351.8	350.2	...	348.6	348.0	348.7	348.2	....
18				354.1	351.7	350.2	349.0	349.2	..	348.4	348.3	....
19				353.9	351.7	....	348.9	349.1	348.2	348.4	348.3	....
20				353.8	351.7	350.2	348.7	349.1	348.0	348.4	....	....
21				353.7	351.7	350.0	349.0	..	348.1	348.4	348.8	....
22				353.7	352.0	350.0	348.8	349.5	348.0	348.5	348.1	....
23				353.6	351.7	349.9	348.8	349.4	348.0	...	348.0	....
24				353.7	351.6	349.9	...	349.3	348.0	349.4	348.7	....
25				353.5	351.5	349.8	348.6	348.3	...	349.1	348.0	....
26				353.4	351.5	....	348.5	348.3	348.3	349.0	347.9	....
27				353.4	351.4	349.6	348.5	349.3	348.1	348.9	.	....
28				353.3	351.4	349.5	348.5		348.2	349.0	348.6	....
29				353.4	....	349.5	348.6	348.2	348.2	348.9	348.0	....
30				353.4	351.5	349.5	348.7	348.1	348.2	....	347.9	....
31				......	351.3	......	......	348.1	......	349.4	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River at Mouth of Ox Creek.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1				354.2	351.6	349.1	351.1	349.4	349.4	.....	349.3	349.4
2				...	351.5	349.1	.....	349.3	349.2	349.3	349.2	349.4
3				354.1	351.3	349.0	351.2	349.2	.....	349.1	349.4	.....
4				354.0	351.1	.....	351.1	349.1	350.1	348.8	349.3	350.4
5				354.1	351.1	349.2	351.0	349.6	349.6	348.6	.....	350.3
6				354.0	351.0	349.1	350.6	.....	349.6	348.3	349.7	350.4
7				354.0	.....	348.9	350.5	349.3	349.5	348.3	349.5	350.4
8				354.0	351.2	349.3	350.4	348.9	349.4	.....	349.6	350.4
9				.....	350.9	349.2	.....	348.8	349.[illegible]	349.0	349.7	350.4
10				353.8	350.8	349.2	350.6	348.7	.....	348.7	349.6	.....
11				353.6	350.7	.....	350.2	348.5	349.7	348.6	349.6	350.4
12				353.6	350.6	349.5	350.0	348.7	349.4	348.9	.....	350.3
13				353.5	350.6	349.2	350.0	.....	349.1	349.3	349.8	350.3
14				353.4	.....	349.2	350.1	349.3	349.1	349.5	349.6	350.3
15				353.2	350.8	349.1	350.1	348.9	349.1	.....	349.6	350.3
16				.....	350.5	349.1	.....	349.2	349.0	350.0	349.6	350.3
17				352.9	350.3	349.2	350.1	349.2	.....	349.4	349.6	.....
18				352.7	350.3	.....	349.9	349.4	349.4	349.4	349.5	351.3
19				352.6	350.2	350.5	349.8	349.4	349.1	349.4	.....	350.6
20				352.4	350.2	350.3	349.7	.....	349.0	349.[illegible]	349.6	349.8
21				352.4	.....	350.5	349.7	349.5	348.9	349.3	349.4	349.8
22				352.3	350.4	350.8	349.6	349.1	348.9	.....	349.2	350.5
23				.....	350.0	350.9	.....	349.0	348.9	351.4	349.2	350.6
24				352.4	349.8	351.1	349.7	348.9	.....	351.3	349.1	.....
25				352.1	349.8	.....	349.2	348.8	349.4	351.2	349.1	351.1
26				352.0	349.7	351.5	349.0	348.6	349.0	349.9	.....	350.6
27			354.1	351.9	349.6	351.4	348.[illegible]	.....	348.9	349.6	349.2	350.5
28			354.4	351.7	.....	351.2	348.[illegible]	348.9	348.8	349.5	349.1	350.4
29			354.5	351.6	349.9	351.2	348.[illegible]	348.2	348.7	.....	349.2	350.5
30			354.5	......	349.4	351.2	.....	348.8	348.6	349.4	349.4	350.5
31			354.5	......	349.3	......	349.[illegible]	349.5	......	349.2	.....	.....

* Discontinued for winter.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River at Mouth of Ox Creek.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	350.9	351.0	352.5	......	350.5	349.6	......	347.9	348.1	348.1	348.8	349.8
2	350.6	351.0	351.1	351.8	350.5	349.5	349.6	347.9	......	348.0	348.8	......
3	350.6	352.5	350.3	351.6	350.5	......	349.7	347.9	348.5	348.0	348.7	349.7
4	350.8	......	......	351.6	350.6	349.4	349.9	348.0	348.1	347.9	......	349.4
5	351.0	352.7	350.5	351.7	350.8	349.3	349.7	......	348.0	348.0	348.8	349.2
6	351.0	352.9	350.5	351.8	......	349.3	349.6	348.6	348.0	348.0	348.5	349.4
7	......	352.5	350.4	351.8	350.8	349.2	349.5	348.3	348.0	......	348.4	349.8
8	351.3	352.0	350.3	......	350.7	349.2	......	348.3	348.1	348.1	348.3	351.6
9	352.1	351.8	350.2	351.7	350.8	349.2	349.7	348.3	......	348.0	348.3	......
10	352.5	351.4	350.3	352.2	350.6	......	349.4	348.2	348.0	348.1	348.3	351.2
11	352.4	......	......	352.3	350.6	349.6	349.4	348.2	347.9	348.2	......	351.0
12	352.5	351.3	350.1	352.2	350.4	349.4	349.4	......	347.9	348.2	348.8	350.8
13	351.6	350.9	350.0	352.2	......	349.4	349.4	348.6	347.8	348.2	348.7	350.7
14	......	350.2	349.8	352.1	350.6	349.3	349.3	348.2	348.1	......	348.8	350.5
15	350.8	349.8	349.7	......	350.4	349.2	......	348.1	348.1	348.2	348.9	350.6
16	350.4	349.8	349.7	352.3	350.2	349.2	349.3	348.1	......	348.0	349.0	..
17	350.4	349.7	349.6	352.2	350.2	......	349.1	348.0	348.0	348.0	349.1	350.8
18	350.4	......	......	352.2	350.2	350.2	349.0	348.2	347.9	347.9	......	350.6
19	350.3	349.5	349.8	352.1	350.2	350.4	348.9	......	347.8	347.8	349.5	350.6
20	350.3	349.3	349.4	351.9	......	350.3	348.8	348.2	347.9	348.3	349.4	350.7
21	......	349.4	349.4	351.9	349.9	350.2	348.8	348.1	347.9	......	349.5	350.6
22	350.8	349.5	349.4	......	349.8	350.2	......	348.1	347.9	348.6	349.7	350.5
23	351.0	349.6	349.4	351.7	349.7	350.1	348.9	348.1	......	348.4	349.7	......
24	351.1	349.6	349.3	351.4	349.6	......	348.4	348.1	348.0	348.4	349.8	350.3
25	351.1	......	......	351.3	349.6	350.0	348.3	348.2	348.0	348.5	......	350.6
26	351.0	350.2	349.2	351.1	349.5	349.8	348.3	......	348.0	348.4	350.0	350.4
27	351.0	350.1	349.8	351.1	......	349.7	348.2	348.4	348.1	348.4	349.[illegible]	350.4
28	......	350.5	351.3	351.0	349.7	349.5	348.1	348.1	348.0	......	349.8	350.4
29	350.8	......	351.3	......	349.6	349.4	......	348.1	348.1	349.0	350.0	350.5
30	350.6	......	351.4	350.8	349.8	349.4	348.5	348.2	......	348.7	349.8	......
31	350.6	......	351.7	......	349.6	......	348.2	348.1	......	348.8	......	350.6

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River below Site of old Horseshoe Dam. *

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	......	351.6	349.5	348.9	348.6	348.5	349.2	†
2	......	......	......	......	353.7	351.5	349.6	348.8	348.6	......	349.1	......
3	......	......	......	......	353.7	351.4	......	348.8	348.6	348.9	349.1	......
4	......	......	......	......	353.6	351.3	349.6	348.6	......	348.5	349.1	......
5	......	......	......	......	353.5	......	349.6	348.7	349.1	348.5	349.1	......
6	......	......	......	......	353.4	351.2	349.4	348.7	348.6	348.4	......	......
7	......	......	......	......	353.2	351.1	349.4	......	348.6	348.4	349.2	......
8	......	......	......	......	......	351.0	349.7	348.7	348.2	348.4	348.9	......
9	......	......	......	......	353.0	351.0	349.6	348.6	348.2	......	349.0	......
10	......	......	......	......	352.9	351.0	......	348.4	348.3	348.4	348.9	......
11	......	......	......	......	352.8	350.9	349.5	348.6	......	348.6	348.9	......
12	......	......	......	......	352.6	......	349.6	348.5	348.4	348.4	348.8	......
13	......	......	......	354.8	352.5	350.7	349.6	348.5	348.3	348.8	......	......
14	......	......	......	354.7	352.4	350.6	349.6	......	348.2	348.6	348.7	......
15	......	......	......	354.6	......	350.6	349.7	348.9	348.4	348.6	348.6	......
16	......	......	......	354.5	352.3	350.5	349.6	348.5	348.3	......	348.5	......
17	......	......	......	......	352.2	350.4	......	348.9	348.3	349.1	348.6	......
18	......	......	......	354.4	352.1	350.4	349.5	349.5	......	348.8	348.6	......
19	......	......	......	354.3	352.1	......	349.4	349.5	348.6	348.6	348.6	......
20	......	......	......	354.2	352.1	350.3	349.3	349.7	348.4	348.8	......	......
21	......	......	......	354.1	352.1	350.2	349.2	......	348.3	349.0	348.8	......
22	......	......	......	354.1	......	350.1	349.1	349.7	348.3	349.2	348.4	......
23	......	......	......	354.0	352.0	350.1	349.1	349.8	348.3	......	348.4	......
24	......	......	......	......	352.0	350.0	......	349.7	348.3	349.6	349.0	......
25	......	......	......	353.9	352.0	350.0	349.4	348.7	......	349.3	348.4	......
26	......	......	......	353.8	351.9	......	348.7	348.6	348.4	349.3	348.3	......
27	......	......	......	353.7	351.8	349.9	348.9	349.8	348.4	349.2	......	......
28	......	......	......	353.7	351.9	349.8	348.6	......	348.4	349.2	348.9	......
29	......	......	......	353.8	......	349.7	348.8	349.1	348.4	349.3	348.4	......
30	......	......	......	353.9	351.8	349.6	348.9	348.6	348.5	......	348.3	......
31	......	......	......	......	351.6	......	......	348.7	......	349.3	......	......

* Gage defective. † Discontinued for winter.

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River below Site of old Horseshoe Dam.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	354.4	351.7	349.5	351.6	349.7	349.7	......	349.9	349.9
2	......	......	......	......	351.5	349.5	......	349.6	349.5	349.4	349.6	349.9
3	......	......	......	354.4	351.4	349.2	351.7	349.5	......	348.9	349.9	......
4	......	......	......	354.4	351.3	......	351.6	349.4	350.4	349.0	349.9	350.8
5	......	......	......	354.4	351.3	349.3	351.4	349.3	350.0	348.8	......	350.9
6	......	......	......	354.4	351.3	349.4	351.1	......	349.9	348.8	350.2	350.9
7	......	......	......	354.3	......	349.2	351.0	349.7	350.0	348.9	350.0	350.9
8	......	......	......	354.2	351.2	349.5	351.0	349.2	349.8	......	350.1	351.0
9	......	......	......	......	351.0	349.5	......	349.2	349.8	349.2	350.2	350.9
10	......	......	......	353.9	351.0	349.5	350.9	349.0	......	348.8	350.3	......
11	......	......	......	353.8	351.0	......	350.7	348.8	349.8	349.1	350.4	350.7
12	......	......	......	353.8	350.8	349.6	350.5	349.1	349.7	349.4	......	350.8
13	......	......	......	353.7	350.8	349.6	350.5	......	349.5	349.7	350.3	350.9
14	......	......	......	353.5	......	349.6	350.6	349.6	349.5	350.0	350.1	350.9
15	......	......	......	353.4	350.7	349.5	350.5	349.3	349.5	......	350.1	350.8
16	......	......	......	......	350.5	349.4	......	349.6	349.6	350.4	350.1	351.4
17	......	......	......	353.2	350.4	350.0	350.4	349.7	......	349.9	350.0	......
18	......	......	......	352.9	350.4	......	350.3	349.8	349.6	349.9	350.1	351.8
19	......	......	......	352.8	350.2	350.8	350.3	349.8	349.3	349.9	......	350.7
20	......	......	......	352.7	350.1	351.0	350.2	......	349.3	350.0	350.2	350.3
21	......	......	......	352.7	......	351.1	350.0	350.0	349.4	349.8	349.9	350.5
22	......	......	......	352.7	350.3	351.3	349.8	349.5	349.4	......	349.7	351.0
23	......	......	......	......	350.2	351.4	......	349.4	349.4	350.9	349.6	351.0
24	......	......	......	352.4	350.2	351.7	349.6	349.4	......	350.8	349.6	......
25	......	......	......	352.3	350.1	......	349.3	349.3	349.7	350.8	349.6	351.6
26	......	......	......	352.2	349.9	352.0	349.2	349.1	349.2	350.8	......	351.3
27	......	......	......	352.1	349.9	351.8	349.1	......	349.1	350.1	349.7	351.0
28	......	......	......	352.0	......	351.7	349.1	349.4	349.0	350.0	349.4	350.9
29	......	......	......	351.9	349.8	351.7	349.1	348.7	349.0	......	349.7	351.4
30	......	......	......	......	349.9	351.7	......	349.2	348.9	350.0	349.9	351.5
31	......	......	......	......	349.5	......	350.0	349.9	......	349.7	......	......

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River below Site of old Horseshoe Dam.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	351.5	351.0	353.5	......	351.2	350.1	......	......	348.4	348.3	349.0	350.0
2	351.3	351.0	351.7	352.4	351.1	350.1	350.1	......	......	348.2	349.0	......
3	351.2	352.7	351.0	352.3	351.2	......	349.8	348.2	348.4	348.1	349.0	350.2
4	351.3	......	......	352.2	351.3	350.0	350.0	348.6	348.4	348.2	......	349.7
5	351.5	353.1	351.0	352.3	351.4	349.8	350.3	......	348.3	348.2	349.4	349.7
6	351.7	354.2	351.0	352.4	......	349.7	350.0	348.9	348.3	348.2	348.9	349.8
7	......	353.4	351.0	352.4	351.4	349.7	349.9	348.8	348.3	......	348.9	350.1
8	351.9	353.2	350.9	......	351.4	349.7	......	348.8	348.2	348.4	348.8	352.3
9	352.6	353.0	350.8	352.3	351.5	349.8	350.3	348.7	......	348.5	348.7	......
10	353.0	352.3	350.8	352.9	351.1	......	349.9	348.6	348.5	348.6	348.6	352.8
11	353.8	......	......	352.9	351.1	350.3	350.0	348.7	348.3	348.5	......	352.8
12	352.8	352.3	350.7	352.8	351.2	350.1	350.0	......	348.3	348.3	349.4	353.1
13	352.0	351.9	350.5	352.7	......	350.1	349.9	348.6	348.2	348.5	349.0	351.8
14	......	350.9	350.4	352.7	351.1	350.0	349.9	348.6	348.2	......	349.1	351.5
15	351.3	350.6	350.3	......	351.1	349.9	......	348.6	348.3	348.6	349.2	351.3
16	350.9	351.4	350.3	352.9	351.1	349.8	350.0	348.6	......	348.5	349.2	......
17	350.9	351.2	350.2	352.9	351.1	......	349.6	348.4	348.4	348.2	349.3	351.3
18	351.0	......	......	352.8	351.1	350.9	349.5	348.5	348.2	348.3	......	351.3
19	350.8	350.2	350.3	352.7	351.1	351.0	349.5	......	348.2	348.4	349.9	352.0
20	350.9	350.0	350.0	352.6	......	350.9	349.4	348.6	348.2	348.6	349.7	352.2
21	......	349.9	349.8	352.5	350.7	350.7	349.3	348.4	348.2	......	349.9	351.3
22	351.3	350.0	349.8	......	350.5	350.7	......	348.4	348.1	349.0	350.1	351.7
23	351.4	350.1	349.7	352.4	350.3	350.8	349.4	348.5	......	348.9	350.1	......
24	351.7	350.2	349.8	352.1	350.2	......	349.1	348.4	348.7	348.9	350.2	......
25	351.7	......	......	351.9	350.1	350.8	349.0	348.3	348.3	348.8	......	......
26	351.6	350.7	349.7	351.8	350.0	350.4	348.8	......	348.2	348.8	350.3	......
27	351.5	350.7	350.3	351.7	......	350.3	348.8	348.9	348.2	348.8	350.1	......
28	......	350.8	351.5	351.6	350.3	350.2	348.9	348.4	348.2	......	350.2	......
29	351.4	......	351.8	......	350.2	350.1	......	348.4	348.2	349.2	350.4	......
30	351.2	......	352.0	351.3	350.1	350.1	349.1	348.4	......	349.1	350.2	......
31	351.1	......	352.2	......	350.2	......	348.3	348.4	......	349.1	......	......

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* Gage defective.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River above Site of old Horseshoe Dam.‡

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1						352.8	351.0	350.3	350.0	350.2	350.9	*
2					355.0	352.7	†	350.2	350.0		350.8	
3					354.9	352.6	†	350.2	350.0	350.3	350.8	
4					354.8	352.4	†	350.2		350.3	350.8	
5					354.7		†	350.2	350.1	350.3	350.8	
6					354.6	352.2	†	350.2	350.0	350.3		
7					354.5	352.2	†		350.0	350.3	350.8	
8						352.1	350.7	350.1	350.0	350.3	350.7	
9					354.2	352.1	350.6	350.1	350.0		350.7	
10					354.1	352.2		350.1	350.0	350.4	350.6	
11					354.0	352.0	350.6	350.1		350.4	350.6	
12					353.8		350.7	350.0	350.0	350.5	350.6	
13				356.2	353.7	352.0	350.7	350.0	350.0	350.6		
14				356.1	353.5	351.9	350.7		350.0	350.4	350.6	
15				356.0		351.8	350.8	350.0	350.0	350.5	350.5	
16				355.9	353.4	351.8	350.7	350.0	350.0		350.5	
17					353.4	351.7		350.0	350.0	350.6	350.5	
18				355.7	353.3	351.7	350.6	350.0		350.5	350.6	
19				355.7	353.3		350.5	350.0	350.1	350.5	350.5	
20				355.5	353.2	351.6	350.4	350.2	350.0	350.5		
21				355.5	353.2	351.5	350.4		350.0	350.7	350.5	
22				355.3		351.4	350.3	350.2	350.0	350.8	350.5	
23				355.3	353.2	351.4	350.4	350.3	350.0		350.4	
24					353.2	351.4		350.2	350.0	351.0	350.5	
25				355.1	353.2	351.3	350.4	350.1		350.9	350.5	
26				355.0	353.1		349.8	350.0	350.3	350.9	350.5	
27				355.0	353.0	351.2	350.2	350.1	350.2	350.9		
28				355.0	353.0	351.2	350.3		350.2	350.9	350.5	
29				355.1		351.1	350.3	350.1	350.2	350.9	350.5	
30				355.2	352.9	351.1	350.2	350.0	350.3		350.4	
31					352.8			350.0		350.9		

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River above Site of old Horseshoe Dam.‡

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1				355.9	352.9	350.7	352.4	350.8	350.8		351.0	351.1
2					352.8	350.6		350.8	350.7	350.4	350.9	351.0
3				355.8	352.7	350.6	352.4	350.7		350.4	351.1	
4				355.7	352.6		352.3	350.6	351.1	350.4	351.0	351.7
5				355.8	352.6	350.7	352.2	350.5	350.9	350.4		351.8
6				355.8	352.5	350.7	352.0		351.0	350.4	351.9	351.9
7				355.8		350.8	351.9	350.6	351.0	350.4	351.1	351.9
8				355.7	352.4	350.8	351.8	350.4	350.9		351.2	351.9
9					352.2	350.8		350.5	350.8	350.5	351.3	351.9
10				355.4	352.1	350.8	351.7	350.3		350.4	351.3	
11				355.3	352.1		351.6	350.4	350.8	350.6	351.3	351.7
12				355.2	352.0	350.8	351.4	350.4	350.8	350.7		351.8
13				355.1	352.0	350.9	351.4		350.7	350.9	351.3	351.8
14				355.0		350.9	351.5	350.5	350.7	351.0	351.2	351.8
15				354.8	351.9	350.8	351.4	350.6	350.7		351.2	351.6
16					351.8	350.7		350.7	350.7	351.2	351.2	352.2
17				354.5	351.7	351.1	351.3	350.8		351.0	351.1	
18				354.4	351.6		351.2	350.9	350.6	351.0	351.2	352.3
19				354.2	351.5	351.8	351.2	350.8	350.6	351.0		351.4
20				354.0	351.4	351.8	351.1		350.6	351.1	351.2	351.3
21				354.0		352.0	351.0	350.9	350.6	351.0	351.0	351.6
22				353.8	351.3	352.2	350.9	350.7	350.6		350.9	351.9
23					351.3	352.3		350.6	350.6	351.4	350.9	352.0
24				353.8	351.3	352.4	350.8	350.5		351.3	350.9	
25				353.6	351.2		350.6	350.5	350.6	351.3	350.8	352.2
26				353.5	351.1	352.8	350.5	350.4	350.5	351.3		352.1
27				353.4	351.1	352.7	350.4		350.5	351.1	350.9	352.0
28				353.2		352.6	350.4	350.4	350.4	351.0	350.9	351.9
29				353.2	351.0	352.5	350.6	350.3	350.4		350.9	352.3
30					350.9	352.5		350.6	350.4	351.0	350.8	352.3
31					350.9		350.9	350.9		351.0		

*Discontinued for winter. † Out of use. ‡ Gage defective.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River below Phoenix Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	....	.....	......	......	.....	357.9	355.6	355.1	354.9	355.0	355.0	355.0
2	....	.....	......	......	360.9	357.9	355.5	355.2	354.9	......	355.0	354.9
3	....	.....	......	......	360.9	357.7	......	355.3	354.8	354.7	355.0	355.1
4	....	.....	......	......	360.7	357.5	......	355.3	......	355.0	355.0	......
5	....	.....	......	......	360.5	......	......	355.3	354.9	354.9	355.1	355.1
6	....	.....	......	......	360.2	357.3	......	355.3	354.8	354.9	......	355.1
7	....	.....	......	......	360.1	357.2	355.6	......	355.1	355.0	355.0	355.0
8	....	.....	......	......	......	357.0	355.5	355.1	355.1	354.8	355.1	355.1
9	....	.....	......	......	359.9	357.1	355.4	355.1	355.0	......	355.2	355.0
10	....	.....	......	......	359.8	357.1	......	355.1	355.0	354.8	355.1	355.0
11	....	.....	......	......	359.5	357.0	355.4	355.1	......	354.9	355.1	......
12	....	.....	......	......	359.3	......	355.4	355.0	354.9	354.9	355.1	354.7
13	....	.....	......	......	359.1	356.8	355.3	355.0	354.9	355.1	......	354.8
14	....	.....	......	......	358.9	356.8	355.4	......	354.9	355.0	355.0	354.9
15	....	.....	......	......	......	356.7	355.4	355.0	355.1	355.0	355.0	354.9
16	....	.....	......	362.1	358.8	356.6	355.4	355.0	355.0	......	354.9	355.0
17	....	.....	......	....	358.7	......	......	355.1	354.9	355.1	355.1	355.0
18	....	.....	......	361.9	358.6	......	355.4	355.0	......	355.1	355.0	......
19	....	.....	......	361.8	358.6	......	355.3	354.7	354.8	355.0	354.9	354.8
20	....	.....	......	361.6	358.5	355.9	355.3	354.9	354.8	355.1	......	354.8
21	....	.....	......	361.5	358.6	355.9	355.3	......	354.8	355.2	355.1	354.8
22	....	.....	......	361.5	......	356.0	355.3	354.8	354.8	355.1	355.0	354.8
23	....	.....	......	361.3	358.5	356.0	355.2	354.9	354.8	......	354.9	354.9
24	....	.....	......	....	358.4	355.9	......	355.0	354.9	355.4	354.9	354.9
25	....	.....	......	361.2	358.3	355.9	355.0	355.1	......	355.2	355.0	......
26	....	.....	......	361.2	358.4	......	354.6	355.1	355.0	355.1	354.9	355.5
27	....	.....	......	361.2	358.3	355.9	355.0	355.0	354.9	355.2	......	355.4
28	....	.....	......	361.2	358.3	355.7	355.1	......	355.1	355.2	354.9	356.0
29	....	.....	......	361.1	......	355.7	355.1	355.0	355.1	355.1	355.0	356.9
30	....	.....	......	361.1	358.0	355.7	355.0	354.9	355.0	......	354.9	357.2
31	....	.....	......	......	357.9	......	......	354.9	......	355.1	......	356.7

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River below Phoenix Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	357.3	356.3	361.6	357.6	354.8	356.6	354.6	354.8	......	354.8	354.9
2	356.9	357.4	356.2	......	357.4	354.8	......	354.4	354.6	354.3	354.8	354.9
3	357.3	357.7	356.1	361.2	357.3	354.8	356.5	354.2	......	354.3	354.9	......
4	357.3	357.6	356.1	361.3	357.0	......	356.4	354.3	354.6	354.2	354.9	355.8
5	357.5	......	......	361.5	356.9	354.6	356.4	354.2	354.6	354.2	......	355.7
6	357.5	357.6	355.9	361.3	357.0	354.6	356.2	......	354.6	354.2	355.2	355.9
7	358.0	357.4	355.8	361.4	......	354.8	356.1	354.2	354.8	354.0	355.2	355.9
8	......	357.5	355.8	361.2	356.8	354.7	355.9	354.4	354.8	......	355.2	356.0
9	358.2	357.6	355.9	......	356.6	354.6	......	354.3	354.7	354.3	355.2	356.0
10	358.3	357.3	355.8	360.8	356.5	354.8	355.6	354.2	......	354.2	355.1	......
11	358.2	357.4	355.6	360.7	356.4	......	355.4	354.0	354.7	354.4	355.1	355.8
12	358.1	......	......	360.6	356.2	354.9	355.2	354.1	354.6	354.4	......	355.9
13	358.0	357.4	355.6	360.4	356.2	354.8	355.2	......	354.6	354.5	355.2	355.9
14	357.9	357.3	355.4	360.2	356.2	354.7	355.3	354.2	354.4	354.7	355.2	355.8
15	......	357.3	355.2	360.0	356.0	354.6	355.2	354.5	354.4	......	355.2	355.6
16	357.7	357.2	355.2	......	356.0	354.6	......	354.3	354.2	354.8	355.2	355.6
17	357.5	357.1	355.2	359.8	355.9	355.1	355.1	354.4	......	354.9	355.1	......
18	357.4	357.3	355.2	359.4	355.8	......	355.0	354.4	354.4	354.8	355.1	355.4
19	357.3	......	......	359.2	355.7	355.8	355.0	354.6	354.4	354.8	......	355.2
20	357.3	357.3	357.3	358.9	355.5	355.9	354.8	......	354.0	354.8	355.0	355.2
21	357.2	357.3	357.3	358.9	......	355.9	354.7	354.6	354.3	354.7	354.8	355.6
22	......	357.3	357.2	358.8	355.2	356.4	354.6	354.4	354.3	......	354.7	355.9
23	357.0	357.1	357.3	......	355.1	356.6	......	354.4	354.4	355.0	354.8	356.0
24	356.9	356.9	357.7	358.6	355.0	356.8	354.7	354.2	......	355.0	354.9	......
25	357.0	356.8	359.0	358.4	355.0	......	354.6	354.4	354.4	354.9	354.9	356.1
26	357.3	......	......	358.4	355.0	357.2	354.6	354.4	354.4	354.9	......	356.2
27	357.6	356.5	361.1	358.1	355.0	357.1	354.6	......	354.4	354.9	354.6	356.0
28	357.7	356.4	361.6	358.0	......	357.0	354.5	354.4	354.3	355.0	354.8	356.0
29	......	......	361.8	357.9	354.8	356.9	354.7	354.2	354.3	......	354.8	356.5
30	357.7	......	361.9	......	354.8	356.8	......	354.6	354.2	354.9	354.8	356.5
31	357.6	......	362.0	......	354.8	......	354.6	355.0	......	354.8	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River below Phoenix Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	356.5	356.4	355.9	......	356.5	......	......	353.4	353.3	353.5	353.8	355.2
2	356.5	356.1	355.2	357.7	356.4	......	354.5	353.4	353.4	353.4	353.7	......
3	356.4	356.1	355.1	357.7	356.3	......	354.7	353.4	353.3	353.4	353.7	354.8
4	356.4	......	......	357.8	356.4	......	354.9	353.3	353.4	353.4	......	354.8
5	356.6	356.2	355.9	357.8	356.5	......	354.8	......	353.3	353.3	353.8	354.7
6	356.7	356.5	356.1	357.9	......	......	354.7	353.6	353.3	353.3	353.9	354.8
7	......	356.8	356.0	358.0	......	......	354.7	353.7	353.3	......	353.8	354.8
8	356.5	356.7	355.9	......	......	......	......	353.7	......	353.3	353.9	355.0
9	356.6	356.5	355.8	358.4	......	......	354.7	353.7	353.4	353.2	354.0	......
10	356.7	356.3	355.7	358.6	......	......	354.7	353.7	353.4	353.2	353.9	354.8
11	356.8	......	......	358.7	......	......	354.7	353.8	353.3	353.3	......	354.9
12	356.7	355.6	355.6	358.6	......	......	354.7	......	353.4	353.3	353.9	355.0
13	356.4	355.2	355.6	358.6	......	......	354.6	353.6	353.5	353.3	353.9	355.0
14	......	355.0	355.6	358.4	......	......	354.5	353.6	353.4	......	353.9	355.2
15	355.7	355.0	355.4	......	......	......	......	353.5	......	353.4	353.9	355.2
16	355.7	355.0	355.3	358.7	......	......	354.4	353.5	353.4	353.4	354.1	......
17	355.7	354.8	355.2	358.7	......	......	354.3	353.4	353.4	353.5	354.1	356.4
18	355.8	......	......	358.5	......	......	354.2	353.4	353.4	353.5	......	356.4
19	355.8	354.9	355.2	358.3	......	......	354.1	......	353.4	353.6	354.5	356.6
20	355.7	354.7	355.1	358.2	......	......	354.1	353.3	353.3	353.6	354.6	356.6
21	......	354.8	355.0	358.1	......	......	354.0	353.3	353.3	......	354.7	356.8
22	356.3	354.9	354.9	......	......	......	......	353.4	......	353.6	354.7	357.0
23	356.6	355.0	354.9	357.9	......	......	354.2	353.4	353.4	353.6	354.9	......
24	356.7	355.1	354.9	357.6	......	......	354.0	353.4	353.4	353.7	355.0	359.2
25	356.9	......	......	357.5	......	......	354.0	353.4	353.4	353.7	......	359.0
26	356.9	355.6	355.0	357.3	......	......	353.8	......	353.4	353.8	355.1	358.8
27	356.8	355.5	355.7	357.2	......	......	353.7	353.4	353.3	353.8	355.0	358.0
28	......	355.6	356.4	356.9	......	......	353.5	353.3	353.3	......	354.9	357.4
29	356.8	......	356.9	......	......	......	......	353.3	353.3	353.7	355.0	356.6
30	356.8	......	357.3	356.6	......	......	353.7	353.3	......	353.8	355.1	......
31	356.7	......	357.6	......	......	......	353.6	353.3	......	353.9	......	356.2

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River above Phoenix Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	......	362.5	361.1	361.7	361.5	361.4	362.1	361.6
2	......	......	......	......	363.8	362.4	361.0	361.8	361.5	......	362.1	361.6
3	......	......	......	......	363.9	362.3	......	361.7	361.4	361.9	362.2	361.6
4	......	......	......	......	363.9	362.2	361.2	361.8	......	361.8	362.2	......
5	......	......	......	......	363.8	......	361.0	361.8	361.5	361.7	362.1	361.7
6	......	......	......	......	363.7	362.0	361.0	361.7	361.5	361.6	......	361.6
7	......	......	......	......	363.6	362.0	360.9	......	361.5	361.7	362.1	361.6
8	......	......	......	......	......	362.0	360.9	361.6	361.5	361.7	362.0	361.6
9	......	......	......	......	363.5	362.0	360.9	361.5	361.4	......	362.0	361.5
10	......	......	......	......	363.4	362.0	......	361.5	361.5	361.8	362.0	361.5
11	......	......	......	......	363.3	361.9	360.8	361.5	......	361.8	361.9	......
12	......	......	......	......	363.1	......	360.8	361.4	361.4	361.7	361.9	361.5
13	......	......	......	......	363.1	361.8	360.9	361.5	361.3	361.8	......	361.5
14	......	......	......	......	363.0	361.8	360.8	......	361.4	361.7	362.0	361.4
15	......	......	......	......	......	361.6	360.8	361.6	361.3	361.7	361.9	361.4
16	......	......	......	364.6	362.9	361.6	360.8	361.5	361.4	......	361.8	361.4
17	......	......	......	......	362.8	361.5	......	361.5	361.4	361.8	361.8	361.4
18	......	......	......	364.3	362.8	361.5	360.8	361.4	......	361.7	361.9	......
19	......	......	......	364.4	362.8	......	360.8	361.3	361.3	361.7	361.8	361.4
20	......	......	......	364.3	362.8	361.6	360.6	361.6	361.3	361.9	......	361.3
21	......	......	......	364.2	362.7	361.5	360.5	......	361.4	361.9	361.9	361.3
22	......	......	......	364.2	......	361.5	360.5	361.6	361.4	362.0	361.8	361.3
23	......	......	......	364.2	362.7	361.5	360.5	361.5	361.4	......	361.7	361.3
24	......	......	......	......	362.7	361.4	......	361.6	361.4	362.2	361.7	361.4
25	......	......	......	364.1	362.7	361.4	360.5	361.5	......	362.1	361.7	......
26	......	......	......	364.0	362.7	......	361.7	361.5	361.5	362.1	361.7	361.6
27	......	......	......	364.0	362.6	361.3	361.6	361.5	361.4	362.2	......	361.7
28	......	......	......	364.0	362.5	361.2	361.7	......	361.5	362.2	361.7	362.2
29	......	......	......	364.1	......	361.2	361.7	361.5	361.5	362.1	361.7	362.5
30	......	......	......	364.0	362.5	361.1	361.7	361.5	361.5	......	361.7	362.4
31	......	......	......	......	362.5	......	......	361.5	......	362.2	......	362.5

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River above Phoenix Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	362.0	361.4	364.5	362.2	360.7	361.9	360.7	362.0	......	362.0	361.9
2	362.5	361.9	361.4	......	362.3	360.7	......	360.6	362.0	361.7	362.0	361.9
3	362.7	361.8	361.4	364.4	362.2	360.7	361.8	360.8	......	361.7	362.1	......
4	362.8	361.8	361.4	364.3	362.2	......	361.8	360.6	362.2	361.7	362.0	362.7
5	362.8	......	......	364.3	362.1	360.6	361.8	360.6	362.2	361.7	......	362.6
6	363.1	361.8	361.5	364.4	362.1	360.6	361.7	......	362.2	361.7	362.2	362.6
7	362.9	361.8	361.3	364.3	......	360.7	361.7	360.6	362.2	361.7	362.2	362.6
8	......	361.9	361.3	364.2	362.0	360.7	361.6	360.6	362.0	......	362.2	362.6
9	362.4	361.9	361.3	......	361.8	360.8	......	361.3	361.6	361.7	362.2	362.6
10	362.3	361.8	361.3	364.1	361.8	360.7	361.5	361.6	......	361.7	362.2	......
11	362.2	361.8	361.2	364.0	361.7	......	361.4	361.6	362.1	361.8	362.3	362.5
12	362.3	......	......	364.0	361.7	360.8	361.3	361.7	361.7	361.8	......	362.5
13	362.3	361.9	361.4	363.9	361.6	360.8	361.3	......	361.5	362.0	362.1	362.6
14	362.4	361.8	361.3	363.8	......	360.8	361.2	361.8	361.6	362.1	362.1	362.6
15	......	362.0	361.3	363.7	361.5	360.8	361.2	361.8	361.8	......	362.2	362.4
16	362.3	362.0	361.3	......	361.5	360.7	......	361.9	362.0	362.1	362.1	362.3
17	362.3	361.9	361.3	363.4	361.5	361.1	361.2	362.0	......	362.1	362.1	......
18	362.3	361.8	361.3	363.3	361.4	......	361.0	362.1	362.0	362.1	362.1	362.2
19	362.4	......	......	363.2	361.3	361.4	361.0	362.2	361.9	362.1	......	362.2
20	362.2	361.9	361.7	363.1	361.3	361.5	360.9	......	362.0	362.1	362.0	362.1
21	362.2	361.9	361.9	363.1	......	361.6	360.9	362.3	362.0	362.1	362.0	362.3
22	......	361.9	361.9	363.0	361.3	361.8	360.8	361.9	362.0	......	362.0	362.5
23	362.3	361.7	362.0	......	361.1	361.9	......	361.9	361.9	362.3	362.0	362.7
24	362.2	361.5	362.3	363.0	361.1	362.0	360.7	361.8	......	362.3	362.0	......
25	362.1	361.5	362.9	362.8	361.0	......	360.6	361.6	361.8	362.2	361.8	362.6
26	362.0	......	......	362.8	361.0	362.1	360.5	361.6	361.8	362.2	......	362.6
27	362.3	361.5	363.1	362.7	360.9	362.1	360.5	......	361.8	362.2	361.9	362.6
28	362.1	361.5	364.0	362.6	......	362.1	360.4	361.6	361.8	362.1	361.9	362.6
29	......	......	364.5	362.5	360.9	362.0	360.5	361.6	361.8	......	361.9	362.8
30	362.0	......	364.5	......	360.9	362.0	......	362.0	361.7	362.0	361.9	362.7
31	362.0	......	364.7	......	360.8	......	360.7	362.0	......	362.0	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oswego River above Phoenix Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	362.7	362.5	362.1	......	362.5	361.9	......	361.3	361.2	361.2	361.8	362.5
2	362.7	362.4	361.8	363.2	362.4	361.9	361.7	361.4	......	361.1	361.8	......
3	362.7	362.3	361.9	363.3	362.5	......	361.6	361.3	361.1	361.1	361.8	362.2
4	362.8	......	......	363.3	362.6	361.6	361.5	361.3	361.0	361.0	......	362.1
5	362.8	362.2	362.4	363.3	362.6	361.6	361.7	......	361.0	361.0	361.7	362.1
6	362.8	362.2	362.4	363.3	......	361.6	361.8	361.5	361.0	361.0	361.6	362.0
7	......	362.0	362.4	363.3	362.6	361.7	361.8	361.6	361.0	......	361.6	362.2
8	362.7	361.9	362.3	......	362.4	361.7	......	361.6	360.9	361.2	361.7	362.2
9	362.7	361.9	362.3	363.3	362.5	361.7	361.8	361.6	......	361.3	361.6	......
10	362.7	361.9	362.2	363.6	362.3	......	361.7	361.6	361.2	361.4	361.7	362.1
11	362.7	......	......	363.6	362.4	361.6	361.7	361.7	361.1	361.3	......	362.2
12	362.4	362.0	362.2	363.6	362.3	361.7	361.7	......	361.2	361.2	361.8	362.2
13	362.3	361.8	362.1	363.6	......	361.7	361.6	361.6	361.3	361.2	361.8	362.5
14	......	361.7	362.2	363.6	362.2	361.5	361.7	361.6	361.3	......	361.8	362.4
15	362.3	361.7	362.3	......	362.2	361.8	......	361.5	361.2	361.3	361.9	362.3
16	362.3	361.6	361.9	363.7	362.2	361.9	361.5	361.4	......	361.3	361.9	......
17	362.3	361.7	361.8	363.6	362.1	......	361.5	361.3	361.5	361.4	361.9	362.2
18	362.3	......	......	363.6	362.0	362.4	361.4	361.3	361.6	361.4	......	362.2
19	362.3	361.6	361.8	363.5	361.9	362.3	361.4	......	361.5	361.4	362.1	362.3
20	362.3	361.5	361.7	363.4	......	362.3	361.3	361.3	361.5	361.5	362.2	362.3
21	......	361.7	361.7	363.3	361.8	362.3	361.3	361.4	361.5	......	362.2	362.4
22	362.5	361.8	361.6	......	361.7	362.2	......	361.4	361.4	361.7	362.3	362.5
23	362.7	361.9	361.5	363.2	361.7	362.1	361.2	361.4	......	361.7	362.3	......
24	362.7	361.9	361.5	363.0	361.7	......	361.2	361.4	361.2	361.8	362.4	362.6
25	362.8	......	......	362.8	361.6	362.1	361.1	361.3	361.2	361.8	......	362.5
26	362.9	362.0	361.5	362.7	361.6	362.0	361.1	361.3	361.2	361.8	362.3	362.3
27	362.9	362.1	362.1	362.6	......	362.0	361.0	361.3	361.2	361.8	362.3	362.2
28	......	362.2	362.5	362.3	361.8	362.0	360.8	361.2	361.1	......	362.3	362.2
29	362.7	......	362.9	......	361.7	361.8	......	361.1	361.1	361.7	362.3	362.1
30	362.6	......	363.1	362.5	361.8	361.7	360.8	361.1	......	361.8	362.4	......
31	362.6	......	363.1	......	361.8	......	360.9	361.1	......	361.9	......	362.4

OSWEGO RIVER AT BATTLE ISLAND, N. Y.

Oswego river is formed by the confluence of Oneida and Seneca rivers at Three River Point. The stream is shown throughout its course of twenty-four miles on the Oswego Special and Baldwinsville topographic atlas sheets of the United States Geological Survey. The drainage into the river below the junction of Oneida and Seneca rivers is of small extent and the tributaries are neither large nor numerous, receiving the drainage from a number of small lakes and marshes in a moderately rolling basin. Oneida and Seneca rivers are both notable for the large extent of lake and marsh area contained within their basins, Oneida lake in the former and the Finger lakes tributary to the latter stream affording extensive natural storage regulation of flow to Oswego river. The accompanying tables of discharge show the actual flow past the gaging station, not including the flow in Oswego canal.

This station was established September 14, 1900. It is eight miles above the mouth of the river and 0.6 mile below the State dam at Battle Island. The discharge measurements from which the rating table has been deduced were made from a cableway crossing the stream 2,900 feet below the gage. The bed of the stream is of rock, and the current is smooth.

The stream is paralleled at the gaging station by the Oswego canal, through which a small amount of diversion takes place.

A board gage in two sections is used. The bench mark is the top of a wire spike driven in a shelf cut in the base of a chestnut tree 300 feet northwest of the gage. Its elevation is 17.35 feet above gage datum. U. S. G. S. bench mark = elevation 315.46 (Barge canal datum). Gage zero = 298.11 (Barge canal datum). Gage readings have been taken twice each day during 1905 by Miss May Parmley.

Mean Daily Gage Height, in Feet, of Oswego River at Battle Island, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	5.9	6.05	5.15	7.4	......	......	......	......	......	......	......	......
2	6.35	5.85	5.2	7.65	......	......	......	......	......	......	......	......
3	6.65	5.0	5.05	7.5	......	......	......	......	......	......	......	......
4	6.55	5.15	5.45	7.5	......	......	......	......	......	......	......	......
5	6.1	5.15	5.92	7.5	......	......	......	......	......	......	......	......
6	6.25	5.1	5.8	7.5	......	......	......	......	......	......	......	......
7	5.75	5.25	5.8	7.4	......	......	......	......	......	......	......	......
8	6.5	5.15	5.7	7.3	......	......	......	......	......	......	......	......
9	6.6	5.0	5.65	7.8	......	......	......	......	......	......	......	......
10	6.4	5.0	5.65	8.4	......	......	......	......	......	......	......	......
11	5.8	4.7	5.0	8.3	......	......	......	......	......	......	......	......
12	5.75	5.0	5.65	8.3	......	......	......	......	......	......	......	......
13	5.5	4.92	5.5	8.2	......	......	......	......	......	......	......	......
14	5.25	4.9	5.15	8.05	......	......	......	......	......	......	......	......
15	5.7	4.82	5.0	7.95	......	......	......	......	......	......	......	......
16	5.75	4.82	5.0	8.25	......	......	......	......	......	......	......	......
17	5.8	4.88	5.05	8.05	......	......	......	......	......	......	......	......
18	5.75	4.68	......	8.0	......	......	......	......	......	......	......	......
19	5.8	4.82	5.05	8.0	......	......	......	......	......	......	......	......
20	5.55	4.82	......	7.85	......	......	......	......	......	......	......	......
21	5.45	4.88	......	7.78	......	......	......	......	......	......	......	......
22	6.2	4.88	......	6.55	......	......	......	......	......	......	......	......
23	6.7	4.9	......	6.95	......	......	......	......	......	......	......	......
24	6.95	4.85	......	6.8	......	......	......	......	......	......	......	......
25	6.9	4.75	......	6.65	......	......	......	......	......	......	......	......
26	6.85	5.5	......	6.5	......	......	......	......	......	......	......	......
27	6.6	5.3	6.2	6.45	......	......	......	......	......	......	......	......
28	6.1	5.1	6.8	6.4	......	......	......	......	......	......	......	......
29	6.4	......	7.05	6.15	......	......	......	......	......	......	......	......
30	6.3	......	7.2	6.55	......	......	......	......	......	......	......	......
31	6.15	......	7.3	......	......	......	......	......	......	......	......	......

No record on March 18 and March 20 to 26.

River does not freeze over entirely at gage; shore ice extends from 10 to 50 feet out, leaving an open channel in center of stream.

The frozen period is affected by needle ice at times.

Ice period for 1906, from January 31 to February 26; ice 0.5 to 0.8 foot thick at gage, Backwater from ice jam below gage on February 26 to 28.

During frozen period readings were taken to water-surface through hole cut in ice.

Rating table for Oswego River at Battle Island, N. Y., from January 1, 1905, to December 31, 1906.

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
Feet.	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*
0.00	1,050	1.60	2,280	3.20	4,220	5.60	8,490
0.10	1,110	1.70	2,380	3.30	4,360	5.80	8,890
0.20	1,175	1.80	2,470	3.40	4,510	6.00	9,300
0.30	1,245	1.90	2,580	3.50	4,660	6.20	9,710
0.40	1,310	2.00	2,690	3.60	4,820	6.40	10,120
0.50	1,380	2.10	2,800	3.70	4,980	6.60	10,540
0.60	1,450	2.20	2,910	3.80	5,130	6.80	10,950
0.70	1,520	2.30	3,020	3.90	5,300	7.00	11,390
0.80	1,590	2.40	3,140	4.00	5,470	7.20	11,820
0.90	1,660	2.50	3,270	4.20	5,820	7.40	12,260
1.00	1,750	2.60	3,400	4.40	6,170	7.60	12,700
1.10	1,830	2.70	3,530	4.60	6,540	7.80	13,130
1.20	1,910	2.80	3,660	4.80	6,910	8.00	13,580
1.30	2,000	2.90	3,790	5.00	7,300	8.50	14,700
1.40	2,090	3.00	3,930	5.20	7,690		
1.50	2,180	3.10	4,070	5.40	8,090		

The above table is applicable only for open-channel conditions. It is based on discharge measurements made during 1900-1906. It is fairly well defined above gage height 0.9 foot. Below this point estimates are only approximate.

Mean Daily Discharge, Second-feet, of Oswego River at Battle Island, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	9,090	......	7,590	12,300	......	......	......	......	......	......	......	......
2	10,000	......	7,690	12,800	......	......	......	......	......	......	......	......
3	10,600	......	7,400	12,500	......	......	......	......	......	......	......	......
4	10,400	......	8,190	12,500	......	......	......	......	......	......	......	......
5	10,100	......	9,110	12,500	......	......	......	......	......	......	......	......
6	9,810	......	8,890	12,500	......	......	......	......	......	......	......	......
7	8,790	......	8,890	12,300	......	......	......	......	......	......	......	......
8	10,300	......	8,690	12,000	......	......	......	......	......	......	......	......
9	10,500	......	8,590	13,100	......	......	......	......	......	......	......	......
10	10,100	......	8,590	14,500	......	......	......	......	......	......	......	......
11	8,890	......	7,300	14,200	......	......	......	......	......	......	......	......
12	8,790	......	8,590	14,200	......	......	......	......	......	......	......	......
13	8,290	......	8,290	14,000	......	......	......	......	......	......	......	......
14	7,790	......	7,590	13,700	......	......	......	......	......	......	......	......
15	8,690	......	7,300	13,500	......	......	......	......	......	......	......	......
16	8,790	......	7,300	14,100	......	......	......	......	......	......	......	......
17	8,890	......	7,400	13,700	......	......	......	......	......	......	......	......
18	8,790	......	7,200	13,600	......	......	......	......	......	......	......	......
19	8,890	......	7,400	13,600	......	......	......	......	......	......	......	......
20	8,390	......	......	13,200	......	......	......	......	......	......	......	......
21	8,190	......	......	13,100	......	......	......	......	......	......	......	......
22	9,710	......	......	10,400	......	......	......	......	......	......	......	......
23	10,800	......	......	11,300	......	......	......	......	......	......	......	......
24	11,300	......	......	11,000	......	......	......	......	......	......	......	......
25	11,200	......	......	10,600	......	......	......	......	......	......	......	......
26	11,100	......	......	10,300	......	......	......	......	......	......	......	......
27	10,500	......	9,710	10,200	......	......	......	......	......	......	......	......
28	9,500	......	11,000	10,100	......	......	......	......	......	......	......	......
29	10,100	......	11,500	9,610	......	......	......	......	......	......	......	......
30	9,920	......	11,800	10,400	......	......	......	......	......	......	......	......
31	9,610	......	12,000	......	......	......	......	......	......	......	......	......

Monthly Discharge of Oswego River at Battle Island, N. Y.
[Drainage area, 4,990 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1906.					
January	11,300	7,790	9,610	1.93	2.22
March 1-19, 27-31	12,000	7,200	8,670	1.74	1.55
April	14,500	9,610	12,400	2.48	2.77

OSWEGO RIVER AT HINMANSVILLE, OSWEGO COUNTY, N. Y.

This gaging station, which is located at the highway bridge over the Oswego river at Hinmansville, was established April 13, 1904, by Howard V. Lyon of this Department.

The gage is of the weight-and-chain type, and was located on the farm bridge over the small creek that joins the river just above the highway bridge until December 18, 1905, when it was moved to its present location, which is ten feet west of the middle pier on the north side of the Hinmansville bridge. The datum to which all gage readings are added is 348.643, which is the elevation of bottom of weight when the end of chain is opposite the zero of the gage. Observations of the stage of the stream are taken each day by F. M. Hughes.

The meter measurements are made from the bridge, which consists of two spans, with a total length of 288.6 feet between abutments. The river channel is of fairly uniform cross-section. There are, however, the remains of two old bridge piers that were not entirely removed when the bridge was rebuilt. The channel is straight for some distance below the bridge and for about 500 feet above the bridge, where it bends sharply to the east. The water level at this station is probably affected by backwater from Phoenix dam and also by the growth of aquatic vegitation in the stream channel at certain times. No effort has been made to derive a curve of discharge from the observations.

Current Meter Discharge Measurements of Oswego River at Hinmansville, N. Y.

DATE.	Hydrographer.	Gage height.	Elevation of water-surface.	Width.	Area of section.	Mean velocity.	Discharge.
		Feet.		*Feet.*	*Square feet.*	*Feet per second.*	*Second-feet.*
1905.							
Sept. 15	....	2.9	351.5	256.5	1,785	2.82	5,042
Oct. 7	....	2.3	350.9	254.5	1,632	2.30	3,756
Nov. 25	....	3.2	351.8	257.1	1,862	3.01	5,600
1906.							
April 5	L. R. Ellis...........	6.6	355.2	265.3	2,605.1	4.79	12,479
April 7	L. R. Ellis...........	6.6	355.2	265.3	2,605.1	4.75	12,383
April 10	L. R. Ellis...........	7.3	355.9	266.2	2,778.0	4.20	11,674
April 14	C. A. Poole..........	7.1	355.7	265.6	2,755.2	4.13	11,380
April 25	C. A. Poole..........	6.1	354.7	266.6	2,490.9	3.80	9,475
April 27	C. A. Poole..........	5.9	354.5	266.8	2,436.4	3.62	18,822
May 3	C. A. Poole..........	5.1	353.7	264.3	2,312.2	3.85	8,907
May 10	C. A. Poole..........	5.1	353.7	264.3	2,211.3	4.08	9,035
May 17	C. A. Poole..........	4.8	353.4	263.8	2,131.2	4.06	8,663
May 25	C. A. Poole..........	4.1	352.7	263.1	1,960.0	3.70	7,239
June 6	J. H. McCormick.....	3.6	352.2	259.1	1,822.1	3.17	5,777
Sept. 21	E. F. Weeks..........	1.88	350.56	235.2	1,500.4	1.60	2,394
Oct. 18	E. F. Weeks..........	2.43	351.07	253.2	1,686.2	2.20	*3,710

* Down-stream side of bridge.

ELEVATION OF WATER-SURFACE OF SENECA RIVER AND TRIBUTARIES.

Gages for Determining Elevation of Water-surfaces on Seneca and Clyde Rivers, Ganargua Creek and Onondaga Lake.

STREAM.	Location.	DISTANCE IN MILES FROM— Three River Point.	DISTANCE IN MILES FROM— Station to station.	Present type of gage.
Seneca river	Three River Point *a*	0	0	Board with coppered staples.
Seneca river	Gascon reef	.9	.9	Board with coppered staples.
Seneca river	Belgium (new bridge)	1.9	1.0	Chain and plumb-bob.
Seneca river	Mud lock (foot of Onondaga outlet)	7.0	5.1	Board with coppered staples.
Onondaga outlet	Foot of lake, Long Branch	7.9	.9	Board with coppered staples.
Onondaga lake	Near Iron pier—head of lake—Syracuse	12.5	4.6	Reference point.
Seneca river	Below dam, Baldwinsville	12.4	5.4*b*	Chain and plumb-bob.
Seneca river	Above dam, Baldwinsville	12.5	0.1	Galvanized staple gage.
Seneca river	Below Jack's reef, Eel weir	20.8	8.3	Board with coppered staples.
Seneca river	Above Jack's reef, State ditch	23.2	2.4	Board with coppered staples.
Seneca river	Bonta's bridge, 1 mile west of Cross lake	26.4	3.2	Board with coppered staples.
Seneca river	Mosquito Point bridge	35.6	9.2	Board with coppered staples.
Seneca river	N. Y. C. & H. R. R. bridge, 1½ miles west of Fox Ridge	40.8	5.2	Chain and plumb-bob.
Seneca river	West Mud lock, foot of Cayuga lake	49.0	8.2	Board with coppered staples.
Clyde river	Clyde	56.4*c*	15.6*c*	Chain and plumb-bob.
Clyde river	Lyons	67.6	11.2	Chain and plumb-bob.
Ganargua creek	2 miles west of Newark	76.3	8.7	Chain and plumb-bob.
Ganargua creek	2½ miles east of Palmyra (Harrison mill)	81.0	4.7	Board gage.

[a] Gage on Oneida river highway bridge.
[b] Continuing on Seneca river.
[c] Leaving Seneca river at mouth of Clyde river near Montezuma, 45.8 miles from Three River Point.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Seneca River at Head of Gascon Reef.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	.....	.....	.....	367.2	364.1	361.6	363.8	362.0	362.8	.....	362.7	362.6
2	.....	.....	.....	367.1	363.9	361.5	.....	362.0	362.8	362.3	362.7	362.6
3	.....	.....	.....	367.0	363.8	361.4	363.7	361.9	.....	362.4	362.8	.....
4	.....	.....	.....	366.9	363.7	.....	363.7	361.8	363.1	362.4	362.7	363.5
5	.....	.....	.....	366.9	363.7	361.4	363.6	361.7	363.1	362.3	.....	363.6
6	.....	.....	.....	366.9	363.6	361.4	363.5	.....	363.2	362.2	363.1	363.7
7	.....	.....	.....	366.8	363.4	361.6	363.3	361.6	363.0	362.2	363.0	363.6
8	.....	.....	.....	366.7	363.4	361.7	363.3	361.5	363.0	.....	363.0	363.7
9	.....	.....	.....	366.6	363.2	361.7	.....	361.7	362.9	362.1	363.0	363.7
10	.....	.....	.....	366.4	363.2	361.7	363.1	362.3	.....	362.0	363.1	.....
11	.....	.....	.....	366.3	363.1	.....	362.9	362.3	362.9	362.8	363.0	363.7
12	.....	.....	.....	366.3	363.1	361.8	362.9	362.4	362.8	362.5	.....	363.7
13	.....	.....	.....	366.3	362.9	362.0	362.8	.....	362.8	362.7	363.0	363.7
14	.....	.....	.....	366.2	.....	361.8	362.9	362.5	362.8	362.8	362.9	363.5
15	.....	.....	.....	365.9	362.8	361.7	362.8	362.8	362.7	.....	362.9	363.2
16	.....	.....	.....	365.8	362.7	361.5	.....	362.8	362.6	362.6	362.8	363.2
17	.....	.....	.....	365.8	362.7	362.0	362.8	363.0	.....	362.8	362.8	.....
18	.....	.....	.....	365.7	362.6	.....	362.6	363.1	362.6	362.8	362.8	363.1
19	.....	.....	.....	365.5	362.5	363.8	362.6	363.1	362.5	362.8	.....	362.9
20	.....	.....	.....	365.3	362.4	363.1	362.4	.....	362.6	362.7	362.8	362.6
21	.....	.....	.....	365.2	.....	363.2	362.3	363.0	362.5	362.6	362.7	363.2
22	.....	.....	.....	365.1	362.4	363.5	362.2	362.8	362.6	.....	362.7	363.6
23	.....	.....	.....	365.0	362.3	363.7	.....	362.7	362.4	363.0	362.6	363.6
24	.....	.....	.....	364.9	362.2	363.8	362.1	362.6	.....	363.0	362.5	.....
25	.....	.....	.....	364.7	362.1	.....	362.0	362.5	362.5	362.9	362.5	363.8
26	.....	.....	.....	364.7	362.0	364.1	361.9	362.4	362.4	362.9	.....	363.8
27	.....	.....	366.6	364.5	362.0	364.1	361.7	.....	362.4	362.9	362.5	363.7
28	.....	.....	366.9	364.4	.....	364.1	361.7	362.3	362.4	362.9	362.6	363.6
29	.....	.....	367.1	364.3	361.8	364.0	361.7	362.2	362.5	.....	362.6	363.8
30	.....	.....	367.2	364.2	361.7	363.9	.....	362.8	362.3	362.8	362.5	363.8
31	.....	.....	367.4	.....	361.7	.....	362.1	362.9	.....	362.6	.....	.....

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Seneca River at Head of Gascon Reef. *

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	363.8	363.6	363.0	.....	363.5	362.5	.....	362.1	361.8	361.8	362.4	363.1
2	363.8	363.3	362.6	364.9	363.4	362.6	362.8	362.1	.....	361.5	362.4	.....
3	363.8	363.0	362.6	364.9	363.4	.....	362.8	362.1	361.8	361.5	362.4	363.2
4	363.9	.....	.....	364.7	363.5	362.6	362.9	362.3	361.6	361.5	.....	363.0
5	364.0	363.2	363.6	364.8	363.7	362.5	363.0	.....	361.5	361.6	362.5	362.7
6	364.1	363.1	363.6	364.9	.....	362.5	362.9	362.5	361.4	361.5	362.4	362.6
7	.....	363.0	363.6	364.9	363.8	362.4	362.8	362.4	361.4	.....	362.2	362.6
8	363.9	362.8	363.3	.....	363.7	362.4	.....	362.4	361.4	362.0	362.1	363.1
9	363.9	362.8	363.3	364.7	363.7	362.5	363.1	362.3	.....	361.7	362.1	.....
10	363.8	362.8	363.2	365.1	363.7	.....	363.0	362.3	361.7	361.8	362.1	363.2
11	363.8	.....	.....	365.3	363.7	362.8	363.0	362.3	361.5	361.9	.....	363.1
12	363.4	362.9	363.3	365.3	363.5	362.7	363.0	.....	361.4	361.9	362.5	363.1
13	363.4	362.6	363.0	365.3	.....	362.6	362.9	362.3	361.4	361.8	362.4	363.3
14	.....	362.6	362.9	365.2	363.6	362.6	362.9	362.3	361.5	.....	362.5	363.8
15	363.2	362.4	362.9	.....	363.5	362.5	.....	362.2	361.5	362.1	362.6	363.3
16	363.2	362.4	362.8	365.3	363.5	362.5	362.8	362.2	.....	361.8	362.7	.....
17	363.2	362.3	362.6	365.3	363.3	.....	362.6	362.1	361.6	361.7	362.7	363.7
18	363.2	.....	.....	365.1	363.3	363.3	362.5	362.0	361.5	361.7	.....	363.8
19	363.1	362.3	362.6	365.1	363.2	363.6	362.5	.....	361.5	361.8	363.1	363.7
20	363.0	362.2	362.5	364.9	.....	363.5	362.4	362.1	361.6	362.1	363.1	363.9
21	.....	362.5	362.3	364.9	363.1	363.4	362.4	362.0	361.7	.....	363.4	363.8
22	363.7	362.5	362.3	.....	362.9	363.4	.....	362.0	361.7	362.5	363.4	363.7
23	363.9	362.7	362.3	364.8	362.9	363.4	362.4	362.0	.....	362.4	363.4	.....
24	364.1	362.6	362.2	364.5	362.9	.....	362.2	362.0	361.9	362.3	363.8	363.6
25	364.2	.....	.....	364.4	362.7	363.3	362.1	361.9	361.7	362.4	.....	363.8
26	364.1	363.1	362.4	364.2	362.6	363.2	361.9	.....	361.7	362.4	363.5	363.7
27	364.0	363.1	362.9	364.1	.....	363.1	361.7	362.1	361.6	362.3	363.4	363.3
28	.....	363.0	363.7	363.8	363.0	362.9	361.7	361.9	361.5	.....	363.4	363.2
29	363.8	.....	364.2	.....	362.8	362.8	.....	361.7	361.4	362.6	363.3	363.1
30	363.5	.....	364.3	363.7	362.8	362.8	361.8	361.7	.....	362.5	363.2	.....
31	363.6	.....	364.6	.....	362.8	.....	361.9	361.7	.....	362.5	.....	363.3

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* Gage defective.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Seneca River at Belgium Bridge.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	367.6	364.5	361.9	364.4	362.4	363.1	362.4	363.0	362.9
2	......	......	......	367.5	364.3	361.8	......	362.3	363.1	362.4	363.0	362.9
3	......	......	......	367.4	364.2	361.7	364.2	362.3	......	362.5	362.9	363.4
4	......	......	......	367.3	364.1	......	364.2	362.2	363.3	362.5	362.9	363.5
5	......	......	......	367.3	364.1	361.7	364.1	362.1	363.3	362.4	363.0	363.7
6	......	......	......	367.3	364.0	361.7	364.0	......	363.4	362.5	363.2	363.8
7	......	......	......	367.2	363.8	361.8	363.9	362.1	363.2	362.4	363.0	363.7
8	......	......	......	367.2	363.7	361.9	363.8	362.0	363.2	362.4	363.1	363.8
9	......	......	......	367.1	363.7	361.9	......	362.0	363.0	362.4	363.1	363.8
10	......	......	......	366.8	363.6	361.9	363.6	362.4	......	362.3	363.2	363.7
11	......	......	......	366.7	363.6	......	363.5	362.4	363.0	362.5	363.2	363.8
12	......	......	......	366.7	363.5	362.0	363.4	362.5	362.9	362.8	363.3	363.8
13	......	......	......	366.7	363.3	362.2	363.8	......	362.9	362.9	363.2	363.8
14	......	......	......	366.6	......	362.1	363.4	362.8	362.9	363.1	363.1	363.7
15	......	......	......	366.3	363.1	362.0	363.3	362.8	362.9	363.3	363.1	363.5
16	......	......	......	366.2	363.0	361.8	......	363.1	362.8	363.1	363.0	363.3
17	......	......	......	366.2	363.0	362.2	363.3	363.4	362.8	363.1	363.1	363.4
18	......	......	......	366.1	362.9	......	363.1	363.5	362.8	363.0	363.0	363.3
19	......	......	......	365.9	362.8	363.2	363.1	363.5	362.7	363.1	363.0	363.1
20	......	......	......	365.7	362.7	363.5	362.9	......	362.8	363.1	363.0	362.7
21	......	......	......	365.6	......	363.8	362.8	363.3	362.7	362.9	362.9	363.4
22	......	......	......	365.5	362.6	364.0	362.7	363.2	362.6	363.1	362.8	363.7
23	......	......	......	365.4	362.5	364.3	......	363.0	362.6	363.2	362.7	363.9
24	......	......	......	365.3	362.4	364.3	362.6	362.9	362.7	363.2	362.7	364.1
25	......	......	......	365.2	362.3	......	362.8	362.7	362.7	363.1	362.7	364.1
26	......	......	......	365.1	362.2	364.7	362.3	362.6	362 6	363.1	362.7	364.1
27	......	......	366.9	364.9	362.2	364.7	362.1	......	362.5	363.0	362.6	364.0
28	......	......	367.3	364.8	......	364.7	362.1	362.5	362.4	363.0	362.7	363 9
29	......	......	367.5	364.7	361.9	364.6	362.1	362.4	362.5	362.9	362.8	364.2
30	......	......	367.6	364.6	361.8	364.5	......	363.0	362.3	362.9	362.7	364.2
31	......	......	367.8	......	361.9	......	362.4	363.2	......	362.8	......	......

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Seneca River at Belgium Bridge.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	364.3	363.9	363.4	365.3	363.9	362.9	363.1	362.1	361.9	361.9	362.6	363.3
2	364.3	363.7	362.9	365.3	363.9	362.9	363.1	362.0	361.9	361.6	362.6	363.4
3	364.3	363.2	362.9	365.3	363.9	362.8	363.1	362.0	361.9	361.6	362.5	363.4
4	364.3	363.4	363.5	365.2	363.9	362.8	363.3	362.2	361.7	361.6	362.6	363.2
5	364.4	363.3	363.8	365.3	364.0	362.7	363.4	362.5	361.6	361.7	362.6	363.1
6	364.5	363.2	363.8	365.3	364.2	362.7	363.3	362.7	361.5	361.6	362.6	362.9
7	364.3	363.1	363.7	365.3	364.2	362.6	363.2	362.6	361.5	362.1	362.4	362.9
8	364.2	362.8	363.6	365.2	364.0	362.6	363.4	362.6	361.5	362.1	362.3	363.4
9	364.1	362.8	363.6	365.3	364.0	362.7	363.5	362.5	361.6	361.8	362.3	363.4
10	364.1	362.8	363.5	365.6	363.9	363.0	363.4	362.5	361.8	361.9	362.3	363.3
11	364.0	362.9	363.5	365.8	363.9	363.1	363.4	362.5	361.6	362.0	362.3	363.2
12	363.7	363.0	363.5	365.8	363.8	363.0	363.4	362.5	361.5	362.1	362.6	363.2
13	363.7	362.8	363.3	365.8	363.7	362.8	363.3	362.5	361.5	362.0	362.5	363.4
14	363.7	362.8	363.2	365.7	363.8	362.8	363.3	362.5	361.6	362.1	362.6	363.3
15	363.6	362.6	363.2	365.8	363.7	362.7	363.2	362.3	361.6	362.3	362.7	363.4
16	363.6	362.6	363.0	365.8	363.7	362.7	363.2	362.3	361.6	362.0	362.8	364.0
17	363.6	362.5	362.8	365.7	363.6	363.4	363.0	362.2	361.7	361.9	362.8	364.1
18	363.6	362.4	362.9	365.7	363.6	363.4	362.9	362.1	361.6	361.9	363.1	364.1
19	363.6	362.6	362.9	365.6	363.5	364.1	362.9	362.1	361.6	361.9	363.3	364.0
20	363.5	362.3	362.8	365.5	363.4	364.0	362.8	362.3	361.7	362.2	363.3	364.2
21	363.8	362.6	362.5	365.4	363.4	363.9	362.8	362.2	361.8	362.2	363.6	364.0
22	364.0	362.8	362.5	365.3	363.2	363.9	362.7	362.2	361.8	362.6	363.6	363.9
23	364.1	363.0	362.5	365.2	363.1	363.8	362.9	362.2	361.8	362.5	363.6	363.9
24	364.3	362.9	362.4	364.9	363.1	363.8	362.6	362.2	362.0	362.5	363.5	363.9
25	364.5	363.1	362.5	364.8	362.9	363.8	362.5	362.1	361.8	362.6	363.7	364.0
26	364.4	363.4	362.5	364.5	362.8	363.6	362.4	362.1	361.8	362.6	363.7	364.1
27	364.4	363.4	363.0	364.4	363.0	363.5	362.1	362.2	361.7	362.5	363.6	363.9
28	364.2	363.3	364.0	364.2	363.2	363.3	362.1	362.0	361.6	362.7	363.6	363.5
29	364.1	......	364.6	364.2	363.0	363.2	362.0	361.9	361.5	362.8	363.5	363.4
30	363.8	......	364.8	364.1	363.0	363.2	362.1	361.9	361.7	362.7	363.4	363.4
31	363.9	......	365.0	......	363.0	......	362.2	361.8	......	362.7	......	363.5

* Gage defective.

Current Meter Discharge Measurements of Seneca River at Belgium, N. Y.

DATE.	Hydrographer.	Gage height.	Width.	Area of section.	Mean velocity.	Discharge.
1905.		*Feet.*	*Feet.*	*Square feet.*	*Feet per second.*	*Second-feet.*
Sept. 14	C. A. Poole.......	4.7	282.8	2,588	0.90	2,328
Oct. 6	C. A. Poole.......	4.1	281.8	2,419	0.96	2,333
Oct. 27	C. A. Poole.......	4.7	282.8	2,588	1.14	2,944
Nov. 24	C. A. Poole.......	4.4	282.3	2,503	1.14	2,843
1906.						
April 26	C. A. Poole.......	6.3	283.1	2,997	1.75	5,238
May 4	C. A. Poole.......	5.7	282.0	2,904	1.60	4,642

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Seneca River at Mud Lock.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	368.3	364.5	361.8	364.8	362.2	363.4	362.6	363.1	363.1
2	......	......	......	368.2	364.4	361.7	......	362.4	363.3	362.7	363.0	363.1
3	......	......	......	368.0	364.3	361.8	......	362.4	363.4	362.8	363.1	363.6
4	......	......	......	367.9	364.2	361.8	......	362.3	363.5	362.7	363.2	363.6
5	......	......	......	367.9	364.2	361.7	......	362.2	363.6	362.7	363.3	363.8
6	......	......	......	367.9	364.1	361.7	......	362.2	363.5	362.6	363.4	363.9
7	......	......	......	367.9	364.1	361.9	......	362.1	363.5	362.6	363.3	363.8
8	......	......	......	367.7	364.0	362.0	......	362.2	363.4	362.6	363.4	363.9
9	......	......	......	367.6	363.9	362.0	364.0	362.4	363.3	362.6	363.4	363.9
10	......	......	......	367.3	363.8	361.9	363.9	362.6	363.2	362.5	363.5	363.8
11	......	......	......	367.2	363.6	361.8	363.8	362.6	363.3	362.6	363.4	363.9
12	......	......	......	367.2	363.5	361.7	363.6	362.7	363.2	362.8	363.4	363.9
13	......	......	......	367.0	363.4	362.0	363.5	362.9	363.1	362.9	363.5	363.9
14	......	......	......	366.9	363.4	362.3	363.5	363.0	363.1	363.1	363.4	363.8
15	......	......	......	366.7	363.3	362.1	363.4	363.0	363.0	363.3	363.4	363.6
16	......	......	......	366.5	363.3	362.0	......	363.3	363.0	363.4	363.3	363.7
17	......	......	......	366.4	363.2	362.3	363.6	363.7	363.0	363.3	363.2	363.7
18	......	......	......	366.2	363.1	362.6	363.5	363.9	362.9	363.2	363.2	363.7
19	......	......	......	366.0	363.1	363.4	363.3	363.7	363.0	363.2	363.2	363.8
20	......	......	......	365.8	362.9	363.6	363.2	363.6	363.1	363.3	363.1	363.8
21	......	......	......	365.7	362.8	363.9	363.1	363.6	363.1	363.5	363.1	363.9
22	......	......	......	365.7	362.7	364.2	363.0	363.4	363.0	363.4	363.0	364.0
23	......	......	......	365.6	362.7	364.5	362.7	363.3	363.0	363.5	363.0	364.2
24	......	......	365.3	365.5	362.6	364.7	362.6	363.1	362.9	363.4	362.9	364.3
25	......	......	365.9	365.4	362.5	364.7	362.5	363.0	362.9	363.3	363.0	364.5
26	......	......	366.8	365.3	362.5	365.0	362.5	362.9	362.8	363.3	363.0	364.4
27	......	......	367.4	365.1	362.3	365.0	362.4	362.9	362.8	363.3	363.0	364.3
28	......	......	368.0	365.0	362.2	365.1	362.3	362.8	362.7	363.2	362.9	364.2
29	......	......	368.2	364.9	362.1	365.0	362.3	362.7	362.7	363.2	363.0	364.4
30	......	......	368.3	364.7	362.0	364.9	362.4	362.8	362.6	363.2	362.9	364.6
31	......	......	368.3	......	362.0	......	362.3	363.4	......	363.1	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Seneca River at Mud Lock.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	364.7	364.1	363.7	365.6	364.2	363.1	363.3	362.4	362.1	362.0	362.8	363.7
2	364.5	364.0	363.3	365.7	364.0	363.0	363.2	362.4	362.1	361.9	362.8	363.7
3	364.4	363.8	363.3	365.7	364.1	363.0	363.3	362.4	362.1	361.8	362.7	363.6
4	364.7	363.8	363.8	365.6	364.1	362.9	363.4	362.5	361.9	361.7	362.8	363.5
5	364.7	363.7	363.9	365.7	364.3	362.7	363.5	362.7	361.8	361.8	362.8	363.3
6	364.8	363.7	364.0	365.8	364.3	362.7	363.4	362.8	361.7	361.9	362.8	363.1
7	364.6	363.6	364.2	365.7	364.4	362.7	363.4	362.8	361.7	362.3	362.8	363.4
8	364.5	363.4	364.1	365.7	364.3	362.7	363.6	362.7	361.7	362.3	362.7	363.6
9	364.3	363.3	364.0	365.7	364.2	362.7	363.6	362.7	361.8	362.2	362.6	363.7
10	364.2	363.2	363.9	366.1	364.1	363.1	363.5	362.8	362.0	362.3	362.6	363.7
11	364.1	363.1	363.8	366.3	364.0	363.2	363.5	362.8	361.8	362.3	362.5	363.7
12	364.1	363.0	363.9	366.4	363.9	363.2	363.5	362.7	361.7	362.3	362.8	363.6
13	364.0	363.0	363.6	366.3	363.8	363.0	363.5	362.6	361.7	362.3	362.7	363.7
14	363.9	363.0	363.4	366.1	364.0	362.9	363.4	362.6	361.8	362.4	362.9	363.7
15	363.9	362.9	363.5	366.0	363.8	362.8	363.4	362.5	361.8	362.4	363.1	363.8
16	363.8	362.8	363.4	366.1	363.7	362.8	363.4	362.4	361.8	362.5	363.3	364.3
17	363.8	362.8	363.3	366.2	363.7	363.5	363.2	362.4	361.9	362.5	363.3	364.5
18	363.9	362.7	363.2	366.0	363.6	363.9	363.1	362.3	361.8	362.6	363.3	364.5
19	363.9	362.7	363.2	365.9	363.5	364.2	363.1	362.4	361.8	362.6	363.6	364.5
20	363.8	362.8	363.1	365.8	363.5	364.1	363.0	362.5	361.9	362.5	363.8	364.4
21	364.1	362.8	363.0	365.6	363.4	364.1	363.0	362.5	362.0	362.6	363.9	364.5
22	364.2	363.0	362.8	365.6	363.3	364.0	363.0	362.5	362.0	362.8	364.0	364.5
23	364.4	363.2	362.7	365.3	363.2	364.0	363.0	362.5	362.0	362.8	364.1	364.4
24	364.7	363.3	362.7	365.1	363.1	363.9	362.8	362.5	362.3	362.7	364.2	364.3
25	364.7	363.5	363.0	364.9	363.0	363.9	362.7	362.4	362.0	362.8	364.1	364.2
26	364.7	363.7	363.1	364.8	363.0	363.7	362.6	362.4	362.0	362.9	364.1	364.2
27	364.6	363.7	363.7	364.6	363.1	363.7	362.4	362.4	361.9	362.9	364.0	364.1
28	364.5	363.6	364.6	364.5	363.3	363.6	362.3	362.2	361.8	362.9	364.0	363.7
29	364.4	......	364.9	364.4	363.2	363.5	362.2	362.2	361.7	363.0	364.0	363.5
30	364.3	......	365.2	364.3	363.1	363.5	362.3	362.8	362.0	362.9	363.9	363.7
31	364.2	......	365.4	......	363.1	......	362.4	362.8	......	362.9	......	363.9

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Onondaga Lake Outlet near Long Branch, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	368.5	364.8	362.3	365.2	363.3	364.1	......	363.6	......
2	......	......	......	......	364.6	362.3	......	......	......	363.0	......	......
3	......	......	......	368.2	364.5	362.2	365.1	363.1	......	......	363.6	......
4	......	......	......	368.1	364.4	......	......	......	364.0	363.1	......	......
5	......	......	......	368.1	364.3	362.2	......	362.9	......	......	......	......
6	......	......	......	368.1	364.2	362.2	364.8	......	......	363.0	363.6	364.3
7	......	......	......	368.0	......	362.4	......	362.8	363.9	......	......	......
8	......	......	......	367.9	364.2	362.4	364.6	......	......	......	363.7	......
9	......	......	......	......	364.1	362.5	......	......	363.7	362.9	......	364.3
10	......	......	......	367.6	363.9	362.4	364.4	......	......	......	363.8	......
11	......	......	......	367.5	363.8	......	......	362.9	363.5	......	......	364.3
12	......	......	......	367.3	363.8	362.5	364.2	......	......	363.2	......	......
13	......	......	......	367.1	363.6	362.7	......	......	363.5	......	363.8	364.2
14	......	......	......	367.0	......	362.6	364.2	363.3	......	363.5	......	......
15	......	......	......	366.9	363.6	362.6	......	......	......	......	363.7	364.2
16	......	......	......	......	363.5	362.5	......	363.9	363.4	363.7	......	......
17	......	......	......	366.5	363.4	362.7	364.0	......	......	......	363.6	......
18	......	......	......	366.4	363.3	......	......	......	......	363.6	......	363.8
19	......	......	......	366.2	363.3	363.7	363.8	363.9	363.3	......	......	......
20	......	......	......	366.1	363.2	......	......	......	......	363.6	363.5	364.0
21	......	......	......	365.9	......	......	363.6	363.8	363.4	......	......	......
22	......	......	......	365.8	363.0	364.8	......	......	......	......	363.4	364.2
23	......	......	......	......	362.9	......	......	363.7	363.2	363.7	......	......
24	......	......	365.6	365.6	362.9	365.0	......	......	......	......	363.3	......
25	......	......	......	365.5	362.8	......	......	......	363.2	363.7	......	......
26	......	......	......	365.4	362.7	......	363.1	363.3	......	......	......	364.6
27	......	......	367.8	365.3	362.6	365.5	......	......	363.1	363.6	363.2	......
28	......	......	368.2	365.2	......	......	......	363.2	......	......	......	364.4
29	......	......	368.3	365.1	362.6	365.4	363.0	......	363.1	363.5	363.3	......
30	......	......	368.4	......	362.5	......	......	363.5	......	......	......	......
31	......	......	368.5	......	362.4	......	......	......	......	......	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Onondaga Lake Outlet near Long Branch, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1			363.8		364.2	363.4	364.1	363.1	362.9	362.6	363.4	364.2
2	364.7	364.2	363.4	365.8	364.2	363.4	364.1	363.1	362.9	362.6	363.4	364.2
3			364.5	365.8	364.2		364.0	363.1	362.9	362.5	363.4	364.1
4	364.8			365.7	364.3	363.3	364.0	363.3	362.9	362.5	363.3	364.0
5		364.2	364.4	365.8	364.5	363.2	364.1	363.3	362.8	362.6	363.3	363.9
6	364.7		364.3	365.9		363.2	364.1	363.4	362.7	362.6	363.2	363.7
7		363.6	364.2	365.8	364.6	363.2	364.1	363.6	362.7	362.7	363.2	364.2
8	364.6		364.1		364.5	363.2	364.1	363.6	362.7	362.8	363.1	364.3
9		363.4	364.1	365.9	364.4	363.3	364.1	363.6	362.7	362.8	363.1	364.2
10	364.5		364.0	366.3	364.4		364.3	363.6	362.7	362.8	363.1	364.2
11				366.5	364.2	363.5	364.4	363.5	362.7	362.9	363.2	364.2
12	364.2	363.0	363.9	366.5	364.2	363.5	364.4	363.5	362.7	362.9	363.2	364.1
13			363.8	366.3		363.5	364.4	363.5	362.6	362.9	363.3	364.1
14		363.1	363.7	366.3	364.2	363.4	364.3	363.5	362.5	362.9	363.4	364.2
15	364.0		363.6		364.2	363.4	364.2	363.4	362.6	362.9	363.5	364.3
16		362.9	363.5	366.4	364.1	363.4	364.1	363.3	362.6	362.9	363.5	364.5
17	364.1		363.4	366.3	364.0	364.1	364.1	363.3	362.6	362.8	363.6	364.6
18				366.2	363.9	364.6	364.1	363.3	362.6	362.8	363.7	364.6
19	364.1	362.9	363.2	366.1	363.9	365.0	364.0	363.2	362.6	362.8	363.9	364.6
20			363.1	366.0		365.0	363.9	363.2	362.6	363.0	364.1	364.6
21		363.0	363.0	365.9	363.7	364.9	363.9	363.3	362.7	363.1	364.2	364.7
22	364.4		362.9		363.6	364.8	363.9	363.4	362.8	363.2	364.3	364.6
23		363.3	362.8	365.6	363.6	364.8	363.8	363.4	362.8	363.2	364.4	364.6
24	364.9		362.7	365.4	363.5	364.7	363.7	363.3	362.8	363.3	364.4	364.5
25				365.2	363.4	364.6	363.5	363.2	362.8	363.3	364.5	364.5
26	364.8	363.8	363.1	365.0	363.3	364.5	363.4	363.2	362.8	363.3	364.5	364.5
27			364.4	364.8		364.3	363.3	363.1	362.7	363.3	364.4	364.4
28		363.6	364.8	364.6	363.6	364.2	363.2	363.1	362.6	363.3	364.3	364.3
29			365.2		363.5	364.1	363.0	363.0	362.6	363.4	364.3	364.1
30			365.4	364.4	363.5	364.1	363.0	363.0	362.6	363.4	364.2	364.5
31	364.4		365.7		363.5		363.1	362.9		363.4		364.5

Mean Daily Elevation of Water-surface (Barge Canal Datum) at Head of Onondaga Lake.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1		364.0	363.2	368.2	364.4		365.2	363.4	364.2		363.7	
2										363.0		
3	364.2	363.8	363.0	368.1	364.3	362.6	365.2	363.1			363.6	
4									364.1	363.1		
5	364.3			368.1	364.2			363.0				
6		363.7	362.4			362.6	365.0			363.0	363.7	364.4
7	364.2			368.0				362.8	363.9			
8		363.4	362.4		363.8	362.6	364.8				363.8	
9	364.2								363.8	363.0		364.4
10		363.4	362.4	368.0	363.7	362 6	364.6				363.9	
11	363.9							363.0	363.6			364.4
12				367.4	363.6	362.7	364.3			363.4		
13	364.0	363.4	362.4						363.5		363.9	364.4
14				367.2		362.7	364.4	363.4		363.6		
15		363.0	362.4		363.6						363.8	364.2
16	364.0							364.0	363.4	363.8		
17		363.0	363.6	366.6	363.5	362.9	364.2				363.7	
18	363.8									363.6		363.9
19				366.0	363.4	363.8	364.0	364.0	363.3			
20	363.7		365.4							363.8	363.6	364.1
21		363.0		365.8			363.8	363.9	363.4			
22			365.8		363.1	364.8					363.4	364.2
23	363.6							363.8	363.4	363.9		
24		362.8	366.2	365.6	362.9	365.1					363.4	
25	363.8								363.3	363.8		
26				365.4	362.8		363.4	363.4				364.7
27	364.0	363.0	368.2			365.6			363.2	363.6	363.4	
28				365.0				363.4				364.4
29			368.2		362.6	365.4	363.2		363.1	363.6	363.3	
30	364.0							363.6				
31					362.6							

Mean Daily Elevation of Water-surface (Barge Canal Datum) at Head of Onondaga Lake.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	......	......	......	......	......	363.55	......	363.45	363.15	362.85	363.55	364.4
2	364.85	364.2	363.35	365.9	364.23	......	364.4	......	363.1	362.85	363.55	364.2
3	......	......	......	......	......	......	......	......	363.05	362.85	363.55	364.2
4	364.85	......	......	365.9	364.45	363.45	364.35	363.7	363.05	362.85	363.45	364.2
5	......	364.2	364.45	......	......	......	......	......	363.05	362.85	363.45	364.0
6	364.8	......	......	365.95	......	363.45	364.35	363.6	363.05	362.85	363.45	363.8
7	......	363.6	364.35	......	364.7	......	......	......	363.05	363.05	363.35	364.4
8	364.75	......	......	......	......	363.45	......	363.85	363.0	363.05	363.25	364.4
9	......	363.4	364.15	365.95	364.55	......	364.45	......	362.95	363.05	363.25	364.4
10	364.7	......	......	......	......	......	......	363.85	362.95	363.05	363.25	364.2
11	......	......	......	366.65	364.4	363.75	364.8	......	362.95	363.1	363.25	364.2
12	364.65	363.35	......	......	......	......	......	......	362.9	363.1	363.35	364.2
13	......	......	......	366.45	......	363.7	364.65	363.75	362.85	363.1	363.45	364.2
14	......	363.4	363.8	......	364.35	......	......	......	362.85	363.05	363.55	364.2
15	364.15	......	......	......	......	363.75	......	363.55	362.85	363.05	363.55	364.4
16	......	363.15	363.6	366.45	364.19	......	364.35	......	362.85	363.05	363.65	364.6
17	364.2	......	......	......	......	......	......	363.55	362.85	363.05	363.65	364.4
18	......	......	......	366.3	364.05	365.02	364.35	......	362.85	362.95	363.75	364.4
19	364.15	363.15	363.3	......	......	......	......	......	362.85	362.95	364.05	364.6
20	......	......	......	366.1	......	365.22	364.3	363.55	362.85	363.15	364.15	364.6
21	......	363.55	......	......	363.85	......	......	......	362.95	363.35	364.25	364.6
22	364.55	......	......	......	......	365.05	......	363.45	362.95	363.35	364.45	364.6
23	......	363.55	362.95	365.75	363.75	......	364.25	......	362.95	363.35	364.45	364.6
24	365.05	......	......	......	......	......	......	363.45	363.05	363.4	364.55	364.6
25	......	......	......	365.3	363.55	364.83	363.85	363.35	363.05	363.4	364.55	364.6
26	364.95	363.9	363.15	......	......	......	......	363.35	362.95	363.4	364.55	364.4
27	......	......	......	365.0	......	364.65	363.55	363.25	362.95	363.4	364.45	364.4
28	......	363.55	364.85	......	363.7	......	......	363.25	362.85	363.45	364.45	364.4
29	......	......	......	......	......	364.6	......	363.25	362.85	363.55	364.45	364.2
30	......	......	365.4	364.55	......	......	363.45	363.2	362.85	363.55	364.35	364.0
31	364.1	......	......	......	363.6	......	......	363.2	......	363.55	......	364.2

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Seneca River below Baldwinsville Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	370.0	367.9	365.5	363.9	363.7	363.4	363.5	363.7	363.2
2	......	......	......	370.1	367.9	365.3	363.9	363.8	363.4	363.5	363.8	363.3
3	......	......	......	370.1	367.8	365.3	363.8	363.7	363.5	363.4	363.7	363.3
4	......	......	......	370.0	367.7	365.2	363.8	363.8	363.5	363.4	363.7	363.3
5	......	......	......	369.9	367.5	365.1	363.9	363.8	363.5	363.4	363.7	363.2
6	......	......	......	369.7	367.4	365.0	363.9	363.7	363.4	363.4	363.7	363.2
7	......	......	......	369.5	367.2	365.0	363.9	363.7	363.4	363.4	363.6	363.2
8	......	......	......	369.5	367.0	364.9	363.8	363.7	363.4	363.3	363.7	363.2
9	......	......	......	369.2	367.0	364.9	363.8	363.6	363.4	363.3	363.7	363.2
10	......	......	......	369.2	366.9	364.9	363.8	363.6	363.4	363.4	363.7	363.1
11	......	......	......	369.2	366.6	364.8	363.8	363.6	363.4	363.4	363.7	363.1
12	......	......	......	369.1	366.4	364.8	363.8	363.5	363.4	363.4	363.5	363.1
13	......	......	......	369.0	366.2	364.7	363.9	363.6	363.4	363.3	363.7	363.1
14	......	......	......	368.9	366.1	364.7	363.9	363.6	363.3	363.4	363.6	363.0
15	......	......	......	368.8	366.0	364.7	363.9	363.6	363.4	363.4	363.5	363.0
16	......	......	......	368.7	366.0	364.6	363.9	363.6	363.4	363.4	363.4	363.1
17	......	......	......	368.6	365.8	364.6	363.8	363.5	363.4	363.5	363.4	362.9
18	......	......	......	368.5	365.8	364.6	363.7	363.4	363.4	363.4	363.4	362.9
19	......	......	......	368.4	365.8	364.5	363.7	363.5	363.5	363.5	363.4	363.0
20	......	......	......	368.3	365.8	364.5	363.6	363.6	363.4	363.4	363.5	363.0
21	......	......	......	368.3	365.9	364.5	363.6	363.6	363.4	363.6	363.4	362.9
22	......	......	......	368.2	365.9	364.4	363.5	363.7	363.3	363.7	363.4	363.0
23	......	......	......	368.1	365.9	364.4	363.6	363.6	363.4	363.7	363.3	363.0
24	......	......	......	368.0	365.9	364.3	363.6	363.7	363.3	363.9	363.4	363.0
25	......	......	......	368.1	365.9	364.3	363.5	363.7	363.4	363.8	363.4	363.1
26	......	......	......	368.0	365.9	364.2	363.5	363.6	363.5	363.8	363.3	363.0
27	......	......	......	368.0	365.8	364.2	363.5	363.5	363.4	363.7	363.4	363.3
28	......	......	......	367.8	365.8	364.1	363.5	363.5	363.4	363.8	363.3	363.8
29	......	......	......	367.9	365.6	364.1	363.6	363.5	363.4	363.8	363.3	364.3
30	......	......	......	367.9	365.6	364.0	363.6	363.6	363.5	363.8	363.3	364.4
31	......	......	......	......	365.5	......	363.8	363.5	......	363.8	......	364.4

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Seneca River below Baldwinsville Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	364.4	364.2	......	369.1	365.0	363.4	365.5	363.8	364.0	363.6	363.9	363.8
2	364.4	364.2	......	368.8	365.0	363.5	365.5	363.8	364.0	363.6	363.9	363.8
3	364.5	364.1	......	368.8	364.8	363.4	365.4	363.8	364.2	363.6	364.0	364.2
4	364.7	364.1	......	368.6	364.8	363.4	365.4	363.7	364.2	363.6	364.0	364.4
5	364.6	......	......	368.6	364.6	363.2	365.2	363.4	364.2	363.6	364.0	364.4
6	364.5	......	......	368.4	364.6	363.3	365.2	363.6	364.1	363.6	364.0	364.5
7	364.4	......	......	368.4	364.6	363.2	365.1	363.6	364.0	363.6	364.0	364.6
8	364.4	......	......	368.2	364.6	363.4	364.9	363.6	363.8	363.6	364.0	364.5
9	364.4	......	......	368.0	364.4	363.6	364.8	363.6	363.8	363.6	364.0	364.5
10	364.4	......	......	367.8	364.4	363.6	364.8	363.6	363.8	363.6	364.0	364.5
11	364.4	......	......	367.8	364.3	363.4	364.8	363.6	363.9	363.6	364.0	364.6
12	364.5	......	364.0	367.6	364.2	363.4	364.6	363.6	364.0	364.0	364.0	364.6
13	364.6	......	364.2	367.5	364.2	363.6	364.5	364.2	364.0	364.0	364.0	364.6
14	364.6	......	364.0	367.4	364.1	363.6	364.6	364.2	363.8	364.1	364.0	364.5
15	364.4	......	363.8	367.1	364.2	363.5	364.6	364.2	363.8	364.2	363.9	364.4
16	364.4	......	363.6	367.0	364.0	363.4	364.6	364.4	363.8	364.2	364.0	364.2
17	364.4	......	363.6	366.8	364.0	363.5	364.4	364.5	363.9	364.0	364.0	364.2
18	364.2	......	363.6	366.6	364.0	363.8	364.4	364.4	363.8	364.0	363.9	364.0
19	364.2	......	364.0	366.4	364.0	364.4	364.4	364.4	363.8	364.0	363.8	364.0
20	364.2	......	364.8	366.2	364.0	364.8	364.2	364.4	363.9	364.0	363.8	363.9
21	364.2	......	365.2	366.2	363.8	365.0	364.2	364.4	363.8	364.0	363.8	364.2
22	364.2	......	365.4	366.0	363.8	365.2	364.2	......	363.8	364.0	363.6	364.4
23	364.1	......	365.8	366.0	363.8	365.4	364.0	......	363.8	364.2	363.6	364.8
24	364.3	......	366.8	365.9	363.8	365.6	364.2	......	363.6	364.1	363.6	364.8
25	364.5	......	367.8	365.8	363.8	365.6	364.2	......	363.8	364.0	363.6	365.0
26	364.5	......	368.5	365.6	363.8	366.0	364.0	......	363.7	364.0	363.8	365.0
27	364.6	......	369.0	365.6	363.8	366.0	363.8	......	363.7	364.0	363.8	364.8
28	364.6	......	368.9	365.4	363.8	365.8	363.8	......	363.6	364.0	363.6	364.6
29	364.3	......	369.0	365.4	363.6	365.8	363.8	363.8	363.6	364.0	363.6	365.0
30	364.3	......	369.0	365.2	363.6	365.8	364.0	363.9	363.6	363.9	363.8	365.0
31	364.2	......	369.1	......	363.5	......	363.8	363.9	......	363.8	......	......

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Seneca River below Baldwinsville Dam.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	365.0	364.6	364.0	366.0	364.5	364.0	364.3	363.8	363.4	363.4	363.8	364.4
2	365.1	364.5	363.8	366.2	364.4	363.9	364.4	363.8	363.4	363.3	363.8	364.4
3	365.0	364.8	363.8	366.2	364.5	363.8	364.3	363.9	363.4	363.3	363.8	364.4
4	365.1	364.4	364.2	366.2	364.6	363.8	364.4	363.9	363.4	363.3	363.8	364.2
5	365.2	364.1	364.4	366.2	364.8	363.7	364.5	364.0	363.4	363.4	363.7	364.0
6	365.2	364.0	364.5	366.2	364.8	363.7	364.6	364.2	363.3	363.2	363.7	364.2
7	365.0	363.9	364.5	366.1	364.8	363.7	364.6	364.2	363.4	363.4	363.7	364.4
8	365.2	363.9	364.5	366.0	364.7	363.7	364.7	364.2	363.2	363.4	363.6	364.6
9	365.2	363.8	364.4	366.1	364.7	363.8	364.8	364.1	363.2	363.4	363.6	364.8
10	365.1	363.7	364.4	366.5	364.6	363.8	364.8	364.1	363.3	363.5	363.6	364.9
11	365.1	363.7	364.3	366.6	364.6	363.8	364.8	364.0	363.3	363.5	363.6	364.8
12	365.0	363.7	364.2	366.7	364.5	363.8	363.8	364.0	363.2	363.6	363.7	364.8
13	364.8	363.6	364.2	366.6	364.5	363.8	364.8	364.0	363.2	363.6	363.7	364.7
14	364.6	363.6	364.0	366.6	364.5	363.7	364.8	364.0	363.2	363.5	363.9	364.6
15	364.5	363.6	364.0	366.7	364.5	363.7	364.6	......	363.2	363.6	364.0	364.8
16	364.4	363.6	363.9	366.7	364.5	363.7	364.5	363.8	363.1	363.5	364.1	365.0
17	364.4	363.5	363.8	366.6	364.4	364.2	364.4	363.8	363.3	363.4	364.1	365.2
18	364.4	363.6	363.8	366.6	364.4	364.6	364.4	363.7	363.2	363.4	364.2	365.2
19	364.4	363.6	363.8	366.4	364.4	364.9	364.3	363.6	363.2	363.4	364.4	365.2
20	364.4	363.5	363.8	366.2	364.4	364.9	364.2	363.7	363.3	363.6	364.5	365.2
21	364.5	363.6	363.7	366.0	364.3	364.8	364.2	363.8	363.2	363.6	364.6	365.2
22	364.7	363.7	363.6	366.0	364.2	364.8	364.2	363.7	363.2	363.8	364.7	365.2
23	364.9	363.8	363.5	365.9	364.1	364.8	364.2	363.7	363.1	364.0	364.8	365.0
24	365.1	364.0	363.4	365.6	364.0	364.8	364.1	363.7	363.3	363.9	364.8	365.0
25	365.2	364.1	363.6	365.4	364.0	364.8	364.1	363.6	363.2	363.9	364.6	365.0
26	365.2	364.2	363.6	365.2	364.0	364.7	364.0	363.6	363.2	363.9	364.8	364.8
27	365.0	364.2	364.3	365.0	364.0	364.6	363.8	363.6	363.3	363.8	364.8	364.6
28	364.8	364.1	365.1	364.8	364.0	364.4	363.8	363.6	363.3	363.9	364.6	364.6
29	364.8	......	365.4	364.8	364.0	364.3	363.8	363.6	363.3	363.9	364.6	364.5
30	364.6	......	365.7	364.6	364.0	364.3	363.8	363.5	363.4	363.9	364.6	364.6
31	364.6	......	366.0	......	364.0	......	363.8	363.5	......	363.9	364.5	36488

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* Gage defective.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Seneca River above Baldwinsville Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	376.3	375.6	374.6	373.6	373.2	372.3	372.4	373.1	372.7
2	......	......	......	376.3	375.4	374.6	373.6	373.0	372.4	372.8	373.1	372.7
3	......	......	......	376.3	375.4	374.5	373.8	373.0	372.5	372.6	373.1	372.6
4	......	......	......	376.3	375.4	374.5	373.8	373.0	372.9	372.6	373.1	373.1
5	......	......	......	376.2	375.4	374.6	373.5	372.9	372.6	372.6	373.0	372.5
6	......	......	......	376.1	375.2	374.4	373.5	372.9	372.3	372.4	373.4	372.6
7	......	......	......	376.0	375.2	374.4	373.4	373.2	372.5	372.4	373.1	372.6
8	......	......	......	376.0	375.2	374.4	373.4	372.8	372.5	372.4	373.1	372.6
9	......	......	......	376.0	375.1	374.4	373.4	372.8	372.5	372.8	373.1	372.4
10	......	......	......	376.0	375.0	374.4	373.6	372.8	372.5	372.6	373.0	372.4
11	......	......	......	375.9	375.0	374.4	373.3	372.7	372.9	372.6	373.0	373.0
12	......	......	......	375.8	374.8	374.4	373.4	372.6	372.4	372.6	373.0	372.5
13	......	......	......	375.8	374.8	374.3	373.3	372.8	372.4	372.6	373.4	372.3
14	......	......	......	375.8	374.8	374.2	373.4	373.2	372.4	372.4	373.0	372.3
15	......	......	......	375.7	374.8	374.2	373.4	372.8	372.4	372.4	373.0	372.1
16	......	......	......	375.6	374.8	374.2	373.4	372.8	372.4	373.2	373.0	372.1
17	......	......	......	375.6	374.8	374.0	373.6	372.6	372.4	372.8	372.9	372.1
18	......	......	......	375.6	374.7	374.1	373.2	372.6	373.0	372.8	372.9	372.9
19	......	......	......	375.6	374.8	374.2	373.1	372.6	372.5	372.8	373.0	372.0
20	......	......	......	375.6	374.8	374.0	373.0	373.0	372.4	372.8	373.1	371.8
21	......	......	......	375.5	374.8	374.0	372.9	373.2	372.5	373.0	372.8	372.0
22	......	......	......	375.6	375.0	374.0	373.0	372.8	372.5	373.0	372.8	372.0
23	......	......	......	375.6	374.8	373.9	373.0	372.8	372.5	373.5	372.8	372.0
24	......	......	......	375.6	374.8	373.9	373.2	372.5	372.6	373.2	373.2	372.4
25	......	......	......	375.6	374.8	373.9	372.8	372.5	372.6	373.1	372.7	373.0
26	......	......	......	375.5	374.8	374.0	372.9	372.6	372.8	373.2	372.7	372.8
27	......	......	......	375.4	374.8	373.8	372.9	372.6	372.8	373.2	373.2	372.7
28	......	......	......	375.5	374.8	373.7	373.0	373.0	372.8	373.1	372.6	373.2
29	......	......	......	375.6	374.9	373.6	372.9	372.6	372.6	373.2	372.6	373.6
30	......	......	......	375.5	374.8	373.6	373.0	372.4	372.4	373.5	372.7	373.5
31	......	......	......	......	374.6	......	373.3	372.4	......	373.1	......	373.6

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Seneca River above Baldwinsville Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	374.0	373.2	372.6	375.8	374.2	372.8	374.5	373.0	373.7	374.0	373.0	373.0
2	373.9	373.1	372.7	375.8	374.1	372.9	374.7	373.0	373.8	373.7	373.1	373.0
3	373.7	372.8	372.8	375.6	374.1	372.8	374.7	372.7	374.2	373.7	373.1	373.6
4	373.6	373.0	372.8	375.6	374.0	373.2	374.6	372.8	374.0	373.7	373.1	373.4
5	373.4	373.5	373.4	375.5	374.0	372.7	374.2	373.8	373.8	373.7	373.4	373.4
6	373.4	373.1	372.8	375.5	373.9	372.7	374.2	374.1	373.9	373.7	373.2	373.5
7	373.3	373.1	372.7	375.4	374.2	372.7	374.1	373.8	373.8	373.7	373.0	373.5
8	373.7	373.0	372.5	375.3	373.8	372.9	374.1	373.7	373.7	374.1	373.1	373.5
9	373.4	373.0	372.6	375.3	373.8	373.0	374.2	373.7	373.8	373.7	373.2	373.6
10	373.4	373.0	372.5	375.2	373.8	373.0	373.9	373.6	374.1	373.7	373.2	373.9
11	373.4	372.9	372.5	375.1	373.7	374.4	373.8	373.6	373.7	373.8	373.2	373.6
12	373.5	373.5	373.2	375.1	373.7	374.1	373.7	373.9	373.6	373.8	373.6	373.6
13	373.6	372.9	372.6	375.0	373.6	373.3	373.7	374.0	373.6	374.0	373.2	373.6
14	373.6	372.6	372.6	375.0	373.9	373.1	373.8	373.8	373.6	374.0	373.1	373.6
15	374.0	372.7	372.7	375.0	373.6	373.1	373.8	373.8	373.7	373.5	373.1	373.4
16	373.4	372.7	372.8	375.0	373.5	373.4	374.0	374.1	373.9	373.1	373.1	373.3
17	373.6	372.7	372.7	374.8	373.5	373.2	373.7	374.2	374.2	373.1	373.1	373.5
18	373.6	372.6	372.7	374.7	373.5	373.6	373.7	374.2	374.0	373.0	373.0	373.0
19	373.6	373.2	373.8	374.7	373.5	373.9	373.6	374.2	373.9	373.0	373.5	373.1
20	373.6	372.7	373.9	374.6	373.5	374.2	373.5	374.5	373.8	373.1	373.0	373.0
21	373.5	372.7	374.0	374.6	373.7	374.3	373.3	374.1	373.8	373.1	373.0	373.2
22	373.8	372.6	374.1	374.6	373.3	374.5	373.4	374.0	373.8	373.6	373.0	373.5
23	373.4	372.6	374.3	374.7	373.3	374.5	373.5	374.0	373.9	373.1	372.9	373.7
24	373.4	372.5	374.7	374.5	373.2	374.5	373.2	373.9	374.1	373.3	372.9	374.1
25	373.3	372.5	375.1	374.5	373.2	374.8	373.1	373.8	373.8	373.3	372.9	374.2
26	373.1	373.3	375.6	374.5	373.1	374.6	373.1	373.8	373.7	373.3	373.4	373.8
27	373.0	372.6	375.8	374.4	373.1	374.5	373.0	374.0	373.6	373.1	372.9	373.7
28	373.1	372.6	375.8	374.4	373.5	374.6	373.1	373.4	373.8	373.0	372.8	373.7
29	373.6	......	375.8	374.3	373.0	374.5	373.2	373.3	373.7	373.5	372.9	373.8
30	373.1	......	375.8	374.5	373.3	374.5	373.4	373.7	373.7	373.0	373.4	373.8
31	373.2	......	375.8	......	372.9	......	373.1	373.6	......	373.1	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Seneca River above Baldwinsville Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	374.2	373.5	373.3	374.7	373.8	373.5	373.7	373.5	373.5	373.5	374.2	374.6
2	374.1	373.5	373.2	374.6	373.8	373.5	373.6	373.4	373.6	373.4	374.1	374.8
3	373.9	373.0	373.2	374.6	373.8	373.6	373.5	373.5	373.7	373.4	374.1	374.5
4	373.9	373.5	373.7	374.6	373.9	373.4	373.7	373.6	373.2	373.4	374.3	374.8
5	374.1	373.4	373.7	374.6	373.9	373.3	373.7	373.9	373.1	373.5	374.1	374.1
6	374.0	373.1	373.7	374.6	374.1	373.3	373.6	373.9	373.1	373.7	374.1	374.3
7	374.7	373.0	373.7	374.6	374.0	373.3	373.5	373.9	372.6	373.7	374.1	374.6
8	373.7	373.0	373.7	374.7	373.9	373.3	373.8	373.9	373.1	373.7	374.0	375.2
9	373.6	372.9	373.6	374.5	373.9	373.4	373.7	373.8	373.5	373.8	374.0	374.6
10	373.5	372.9	373.7	374.7	373.9	373.5	373.7	373.8	373.3	373.8	374.0	374.4
11	373.5	373.2	373.8	374.7	373.9	373.4	373.6	373.7	373.0	373.7	374.2	374.4
12	373.4	372.9	373.6	374.8	373.8	373.3	373.6	373.9	373.1	373.7	374.2	374.4
13	373.5	373.0	373.5	374.8	374.0	373.3	373.5	373.7	373.2	373.8	374.2	374.4
14	373.8	372.9	373.4	374.8	373.9	373.3	373.5	373.7	373.1	373.9	374.2	374.5
15	373.5	372.9	373.3	375.0	373.8	373.2	373.7	373.6	372.9	373.8	374.3	374.6
16	373.5	372.9	373.3	374.9	373.8	373.2	373.4	373.6	373.4	373.7	374.4	374.9
17	373.5	372.9	373.3	374.9	373.8	373.7	373.4	373.5	373.2	373.7	374.4	374.9
18	373.6	373.3	373.5	374.8	373.8	373.8	373.3	373.6	373.1	373.7	374.6	374.9
19	373.6	373.0	373.2	374.8	373.7	373.9	373.2	373.8	372.9	373.7	374.5	374.9
20	373.6	372.9	373.1	374.7	373.8	373.9	373.3	373.6	372.9	373.8	374.6	374.8
21	373.8	373.1	373.0	374.6	373.6	373.9	373.3	373.6	372.8	374.2	374.6	374.8
22	373.7	373.2	373.0	374.6	373.6	373.9	373.4	373.6	372.9	374.1	374.7	374.9
23	373.8	373.3	373.6	374.4	373.6	374.0	373.2	373.6	373.6	374.1	374.8	374.7
24	373.9	373.4	373.1	374.4	373.5	374.0	373.1	373.5	373.5	374.2	374.8	374.7
25	373.9	373.6	373.3	374.2	373.5	374.0	373.0	373.6	373.5	374.2	375.1	374.5
26	373.8	373.7	373.1	374.1	373.4	374.0	372.9	373.7	373.5	374.2	374.7	374.4
27	373.8	373.6	373.6	374.0	373.6	373.8	373.5	373.6	373.5	374.1	374.8	374.4
28	374.0	373.5	374.0	374.0	373.4	373.7	373.6	373.5	373.4	374.4	374.7	374.5
29	373.6	......	374.3	374.0	373.5	373.6	373.8	373.5	373.4	374.3	374.8	374.5
30	373.6	......	374.4	373.9	373.6	373.6	373.6	373.5	373.4	374.2	374.6	374.7
31	373.5	......	374.5	......	373.5	......	373.6	373.5	......	374.2	......	374.7

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Seneca River at Foot of Jack's Reef.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	378.8	375.5	373.6	376.6	374.5	374.8	......	374.1	373.9
2	......	......	......	......	375.3	373.6	......	374.4	374.9	374.7	374.1	373.9
3	......	......	......	378.4	375.3	373.6	376.5	374.4	......	374.8	374.1	......
4	......	......	......	378.2	375.2	......	376.4	374.3	375.1	374.8	374.2	374.4
5	......	......	......	378.1	375.1	373.4	376.3	375.2	375.1	374.8	......	374.6
6	......	......	......	378.0	375.1	373.4	376.2	......	375.0	374.8	374.1	374.7
7	......	......	......	377.9	......	373.4	376.1	375.0	375.0	374.8	374.1	374.7
8	......	......	......	377.7	375.0	373.7	376.0	374.9	374.9	......	374.2	374.6
9	......	......	......	......	374.9	373.8	......	374.9	374.9	374.8	374.2	374.7
10	......	......	......	377.3	374.9	373.8	375.9	374.8	......	374.7	374.2	......
11	......	......	......	377.1	374.6	......	375.8	374.8	374.7	374.7	374.2	374.9
12	......	......	......	377.0	374.6	374.0	375.8	374.7	374.7	375.1	......	374.9
13	......	......	......	376.9	374.5	374.2	375.8	......	374.6	375.3	374.1	374.9
14	......	......	......	376.8	......	374.2	375.7	374.9	374.5	375.4	374.1	374.8
15	......	......	......	376.7	374.5	374.1	375.7	374.9	374.7	......	374.1	374.6
16	......	......	......	......	374.5	374.1	......	375.3	374.8	375.3	374.1	374.6
17	......	......	......	376.5	374.5	374.1	375.9	375.6	......	375.2	374.1	......
18	......	......	......	376.3	374.4	......	375.8	375.9	375.2	375.1	374.1	374.3
19	......	......	......	376.2	374.4	375.4	375.7	376.0	375.2	375.2	......	374.3
20	......	......	......	375.9	374.3	375.7	375.4	......	375.1	375.3	373.8	374.1
21	......	......	......	375.8	......	376.0	375.2	375.8	375.1	375.3	373.8	374.2
22	......	......	......	375.7	374.3	376.9	375.0	375.7	375.0	......	373.8	374.5
23	......	......	376.7	......	374.2	377.1	......	375.6	375.0	375.0	373.7	374.6
24	......	......	376.9	376.0	374.1	377.2	375.2	375.4	......	374.8	373.7	......
25	......	......	377.7	376.0	374.0	......	375.2	375.3	374.9	374.7	373.7	375.1
26	......	......	......	375.9	374.0	377.0	375.1	375.2	374.8	374.6	......	374.9
27	......	......	378.4	375.9	374.0	377.0	375.0	......	374.7	374.5	373.7	375.0
28	......	......	378.5	375.7	......	376.9	374.9	375.0	374.7	374.3	373.7	375.0
29	......	......	378.6	375.6	373.8	376.8	374.9	374.8	374.6	......	373.9	375.1
30	......	......	378.7	......	373.7	376.7	......	374.6	374.6	374.1	373.9	375.4
31	......	......	378.8	......	373.7	......	374.6	374.7	......	374.1	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Seneca River at Foot of Jack's Reef.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	375.5	374.7	......	......	374.9	374.3	......	375.3	375.1	374.6	374.8	375.4
2	375.6	374.6	......	......	374.8	374.3	375.3	375.3	......	374.5	374.8	......
3	375.5	374.5	......	......	374.9	......	375.3	375.3	375.2	374.4	374.8	375.4
4	375.6	Discontinued.	......	......	375.0	374.2	375.4	375.5	375.1	374.3	......	375.2
5	375.5		......	......	375.0	374.1	375.5	......	375.0	374.3	374.9	375.0
6	375.2		......	......	......	374.1	375.6	375.7	374.9	374.3	374.8	374.8
7	......		......	......	375.1	374.1	375.6	375.7	374.9	......	374.8	375.0
8	374.9		......	......	375.0	374.1	......	375.7	374.9	374.7	374.7	375.2
9	374.8		......	......	375.0	374.1	375.8	375.7	......	374.7	374.7	......
10	374.6		......	......	375.0	......	375.8	375.6	375.0	374.8	374.7	375.5
11	374.8		......	......	374.9	374.3	375.7	375.6	374.9	374.9	......	375.5
12	374.2		......	......	374.9	374.2	375.6	......	374.8	374.9	374.9	375.4
13	374.2	......	......	......	......	374.2	375.5	375.7	374.8	374.8	374.9	375.4
14	......	......	......	......	375.0	374.1	375.4	375.6	374.7	......	375.0	375.4
15	374.4	......	......	......	374.9	374.1	......	375.6	374.7	374.8	375.1	375.5
16	374.5	......	......	......	374.8	374.0	375.6	375.5	......	374.7	375.2	......
17	374.5	......	......	......	374.8	......	375.6	375.4	374.7	374.6	375.3	376.2
18	374.6	......	......	......	374.8	375.0	375.6	375.4	374.6	374.5	......	376.2
19	374.5	......	......	......	374.8	375.3	375.6	......	374.5	374.4	375.5	376.2
20	374.4	......	......	376.3	......	375.5	375.5	375.5	374.5	374.6	375.5	376.1
21	......	......	......	376.2	374.6	375.6	375.5	375.5	374.6	......	375.6	376.1
22	374.7	......	......	......	374.6	375.6	......	375.5	374.6	375.0	375.6	376.1
23	374.8	......	......	376.0	374.5	375.6	375.6	375.5	374.7	375.0	375.7	......
24	375.0	......	......	375.8	374.5	......	375.6	375.4	374.6	375.1	375.8	376.2
25	375.1	......	......	375.6	374.4	375.6	375.5	375.4	374.6	375.1	......	376.1
26	375.2	......	......	375.4	374.3	375.5	375.5	......	374.6	375.1	375.9	376.0
27	375.2	......	......	375.2	374.3	375.4	375.5	375.4	374.6	375.0	375.8	375.9
28	......	......	......	375.1	374.3	375.3	375.4	375.4	374.6	......	375.7	375.7
29	375.1	......	......	......	374.3	375.1	......	375.3	374.6	375.1	375.6	375.5
30	375.0	......	......	375.0	374.3	375.1	375.5	375.2	......	375.0	375.5	......
31	374.8	......	......	......	374.3	......	375.4	375.2	......	374.9	......	375.7

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Seneca River above Jack's Reef.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	382.0	378.2	376.0	379.0	376.5	376.3	......	376.2	376.2
2	......	......	......	......	378.0	376.0	......	376.4	376.4	375.8	376.2	376.
3	......	......	......	381.7	378.0	376.0	378.8	376.4	......	375.9	376.2	......
4	......	......	......	381.5	377.9	......	378.7	376.4	376.5	375.9	376.3	376.7
5	......	......	......	381.4	377.8	375.8	378.6	376.3	376.5	375.9	......	376.8
6	......	......	......	381.3	377.8	375.7	378.5	......	376.4	375.9	376.4	377.0
7	......	......	......	381.2	......	375.7	378.4	376.4	376.4	375.9	376.4	377.1
8	......	......	......	381.0	377.7	376.0	378.3	376.3	376.3	......	376.5	377.1
9	......	......	......	......	377.6	376.1	......	376.3	376.3	375.9	376.5	377.1
10	......	......	......	380.5	377.6	376.1	377.9	376.2	......	375.8	376.5	......
11	......	......	......	380.3	377.2	......	377.8	376.2	376.2	375.8	376.5	377.1
12	......	......	......	380.2	377.2	376.2	377.8	376.1	376.2	376.3	......	377.1
13	......	......	......	380.1	377.1	376.4	377.8	......	376.1	376.4	376.4	377.1
14	......	......	......	380.0	......	376.4	377.7	376.4	376.0	376.5	376.4	377.1
15	......	......	......	379.9	377.0	376.3	377.7	376.4	376.0	......	376.4	376.9
16	......	......	......	......	376.9	376.3	......	376.9	376.0	376.4	376.4	376.9
17	......	......	......	379.7	376.9	376.3	377.7	377.2	......	376.3	376.4	......
18	......	......	......	379.5	376.8	......	377.6	377.5	376.4	376.2	376.3	376.6
19	......	......	......	379.4	376.8	377.7	377.5	377.5	376.3	376.3	......	376.6
20	......	......	......	379.1	376.6	378.0	377.2	......	376.2	376.4	376.1	376.4
21	......	......	......	379.0	......	378.3	377.0	377.3	376.1	376.4	376.1	376.5
22	......	......	......	378.9	376.7	379.2	376.9	377.2	376.1	......	376.1	376.8
23	......	......	378.6	......	376.6	379.4	......	377.0	376.1	376.5	376.0	376.9
24	......	......	379.3	378.7	376.5	379.5	377.1	376.8	......	376.4	376.0	......
25	......	......	380.1	378.7	376.4	......	376.9	376.7	376.1	376.4	376.0	377.1
26	......	......	......	378.6	376.4	379.4	376.8	376.5	376.0	376.3	......	377.2
27	......	......	......	378.6	376.4	379.4	376.6	......	375.9	376.3	376.0	377.3
28	......	......	......	378.5	......	379.3	376.5	376.4	375.9	376.3	376.0	377.3
29	......	......	......	378.4	376.2	379.2	376.4	376.2	375.8	......	376.2	377.4
30	......	......	382.2	......	376.1	379.1	......	376.1	375.8	376.2	376.2	377.7
31	......	......	382.0	......	376.1	......	376.6	376.2	......	376.2	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Seneca River above Jack's Reef.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	377.8	377.0	......	......	377.4	376.7	......	376.4	376.2	375.9	376.8	377.7
2	377.9	376.9	......	......	377.3	376.7	377.3	376.3	......	375.9	376.7	......
3	377.8	376.8	......	......	377.4	......	377.4	376.4	376.1	375.8	376.7	377.5
4	378.0	Discontinued.	......	......	377.4	376.7	377.4	376.5	376.1	375.8	......	377.4
5	377.9		......	......	377.7	376.6	377.6	......	376.0	375.8	376.7	377.3
6	377.7		......	......	......	376.6	377.6	377.0	375.9	375.8	376.6	377.4
7	......		......	......	377.7	376.6	377.6	377.0	375.9	......	376.5	377.6
8	377.3		......	......	377.7	376.6	......	377.0	375.9	376.0	376.4	377.8
9	377.2		......	......	377.6	376.6	377.8	376.9	......	376.1	376.4	......
10	377.0		......	......	377.6	......	377.9	376.9	375.8	376.2	376.4	377.4
11	376.8		......	......	377.6	376.6	377.8	376.8	375.8	376.2	......	377.4
12	376.7		......	......	377.5	376.6	377.7	......	375.8	376.2	376.4	377.6
13	376.7	......	......	......	......	376.5	377.6	376.8	375.8	376.2	376.6	377.6
14	......	......	......	......	377.4	376.4	377.5	376.8	375.8	......	376.7	377.6
15	376.9	......	......	......	377.4	376.4	......	376.7	375.8	376.2	377.0	377.7
16	377.0	......	......	......	377.4	376.3	377.2	376.7	......	376.1	377.1	......
17	377.0	......	......	......	377.3	......	377.2	376.6	375.7	376.1	377.3	377.7
18	377.1	......	......	......	377.3	377.3	377.2	376.5	375.7	376.0	......	377.9
19	377.0	......	......	......	377.2	377.6	377.1	......	375.7	376.0	377.7	378.5
20	376.9	......	......	379.2	......	377.8	377.1	376.5	375.7	376.2	377.8	378.5
21	......	......	......	379.1	377.0	377.8	377.0	376.6	375.7	......	377.9	378.5
22	377.2	......	......		377.0	377.8	......	376.6	375.7	376.8	378.1	378.4
23	377.3	......	......	378.8	376.9	377.8	376.9	376.6	......	376.8	378.1	......
24	377.4	......	......	378.5	376.8	......	376.8	376.5	375.8	376.8	378.2	377.9
25	377.5	......	......	378.2	376.8	377.8	376.7	376.5	375.8	376.9	......	377.8
26	377.6	......	......	378.1	376.7	377.7	376.6	......	375.9	376.9	378.1	377.8
27	377.5	......	......	377.9	......	377.6	376.5	376.4	375.9	376.9	378.0	377.9
28	......	......	......	377.7	376.7	377.4	376.4	376.4	375.9	......	377.8	377.6
29	377.4	......	......	......	376.8	377.2	......	376.3	375.9	376.8	377.8	377.5
30	377.3	......	......	377.5	376.8	377.2	376.4	376.3	......	376.8	377.8	......
31	377.1	......	......	......	376.8	......	376.4	376.2	......	376.8	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Seneca River at Bridge one-half mile west of Cross Lake.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	382.2	378.4	376.1	379.2	376.7	376.6	376.0	376.4	376.5
2	......	......	......	382.0	378.3	376.0	379.1	376.7	376.6	376.0	376.4	376.5
3	......	......	......	381.8	378.1	375.9	379.0	376.7	376.7	376.0	376.4	376.6
4	......	......	......	381.7	378.0	375.9	378.8	376.7	376.7	376.0	376.4	376.6
5	......	......	......	381.6	377.9	375.9	378.7	376.6	376.7	376.0	376.4	376.9
6	......	......	......	381.4	377.8	375.9	378.6	376.6	376.7	376.0	376.4	377.1
7	......	......	......	381.2	377.7	376.0	378.5	376.6	376.6	376.0	376.5	377.2
8	......	......	......	381.0	377.6	376.2	378.4	376.6	376.5	376.0	376.5	377.2
9	......	......	......	380.8	377.5	376.3	378.3	376.5	376.4	376.0	376.5	377.2
10	......	......	......	380.7	377.4	376.4	378.2	376.5	376.3	376.0	376.6	377.2
11	......	......	......	380.5	377.4	376.4	378.1	376.4	376.3	376.1	370.6	377.3
12	......	......	......	380.4	377.3	376.4	378.0	376.4	376.4	376.3	376.6	377.3
13	......	......	......	380.3	377.2	376.5	378.0	376.4	376.4	376.5	376.6	377.4
14	......	......	......	380.2	377.2	376.5	377.9	376.4	376.4	376.7	376.5	377.3
15	......	......	......	380.1	377.2	376.4	377.9	376.7	376.3	376.7	376.5	377.1
16	......	......	......	380.1	377.1	376.4	377.9	377.2	376.3	376.6	376.4	377.0
17	......	......	......	380.0	377.1	376.3	377.9	377.5	376.4	376.5	376.4	376.8
18	......	......	......	379.7	377.0	377.0	377.8	377.5	376.4	376.5	376.3	376.7
19	......	......	......	379.5	377.0	377.9	377.7	377.5	376.5	376.6	376.3	376.7
20	......	......	......	379.3	376.9	378.6	377.5	377.5	376.5	376.6	376.2	376.6
21	......	......	......	379.2	376.7	378.9	377.4	377.4	376.5	376.6	376.2	376.5
22	......	......	......	379.1	376.6	379.2	377.3	377.3	376.5	376.6	376.1	377.1
23	......	......	378.5	379.0	376.6	379.3	377.2	377.1	376.4	376.6	376.1	377.5
24	......	......	379.1	378.9	376.5	379.5	377.1	376.9	376.4	376.6	376.1	377.8
25	......	......	379.4	378.9	376.5	379.6	377.0	376.7	376.3	376.6	376.0	377.8
26	......	......	......	378.8	376.4	379.8	376.9	376.5	376.2	376.6	376.2	377.7
27	......	......	......	378.8	376.4	379.7	376.8	376.4	376.1	376.5	376.3	377.7
28	......	......	......	378.7	376.4	379.5	376.7	376.3	376.1	376.5	376.3	377.6
29	......	......	......	378.6	376.3	379.4	376.6	376.1	376.0	376.6	376.3	377.8
30	......	......	382.3	378.5	376.2	379.3	376.7	376.3	376.0	376.5	376.4	377.9
31	......	......	382.3	......	376.1	......	376.7	376.5	......	376.4	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Seneca River at Bridge one-half mile west of Cross Lake.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	377.8	377.2	377.0	379.3	377.5	377.0	377.3	376.5	376.3	376.0	376.9	377.9
2	377.8	377.0	376.9	379.5	377.4	377.0	377.4	376.4	376.3	376.0	376.9	377.8
3	377.7	376.9	376.8	379.5	377.5	376.9	377.5	376.5	376.2	376.0	376.9	377.7
4	377.9	376.8	377.0	379.5	377.5	376.9	377.5	376.6	376.2	375.9	376.9	377.6
5	377.8	376.7	377.1	379.5	377.8	376.7	377.6	377.0	376.1	375.9	376.8	377.4
6	377.5	376.5	377.4	379.5	377.8	376.7	377.7	377.1	376.0	375.9	376.7	377.6
7	377.3	376.4	377.5	379.4	377.8	376.7	377.7	377.1	376.0	376.1	376.6	377.9
8	377.3	376.4	377.5	379.2	377.8	376.8	377.9	377.1	376.0	376.2	376.6	378.2
9	377.2	376.4	377.4	379.3	377.7	376.8	378.0	377.0	375.9	376.3	376.5	377.5
10	377.2	376.3	377.5	379.5	377.7	376.8	378.0	377.0	375.9	376.4	376.5	377.5
11	377.1	376.3	377.5	379.7	377.7	376.8	377.9	376.9	375.9	376.4	376.5	377.5
12	377.1	376.2	377.3	379.8	377.6	376.7	377.8	376.9	375.9	376.4	376.6	377.7
13	377.1	376.2	377.1	379.8	377.5	376.6	377.8	376.9	375.9	376.4	376.7	377.8
14	377.4	376.2	377.0	379.9	377.5	376.6	377.6	376.8	375.9	376.3	376.9	377.8
15	377.3	376.2	376.9	379.9	377.5	376.6	377.4	376.8	375.9	376.3	377.1	377.9
16	377.2	376.2	376.8	379.8	377.5	376.5	377.3	376.8	375.8	376.2	377.2	377.9
17	377.2	376.2	376.7	379.7	377.4	377.0	377.3	376.7	375.8	376.1	377.5	378.2
18	377.3	376.2	376.6	379.7	377.4	377.4	377.3	376.6	375.8	376.1	377.6	378.4
19	377.3	376.2	376.7	379.5	377.3	377.8	377.2	376.5	375.8	376.1	377.8	378.7
20	377.3	376.2	376.6	379.3	377.2	378.0	377.2	376.6	375.8	376.3	378.0	378.6
21	377.3	376.3	376.5	379.2	377.1	378.0	377.1	376.7	375.8	376.7	378.0	378.6
22	377.4	376.5	376.4	379.1	377.1	378.1	377.1	376.7	375.8	376.9	378.2	378.5
23	377.5	376.7	376.3	378.9	377.1	378.1	377.0	376.7	375.9	377.0	378.3	378.3
24	377.7	376.8	376.2	378.6	377.0	378.0	376.9	376.6	375.9	377.0	378.3	378.2
25	377.8	376.9	376.2	378.3	377.0	377.9	376.8	376.6	375.9	377.0	378.3	378.0
26	377.8	377.2	376.3	378.2	376.9	377.8	376.7	376.5	376.0	377.0	378.3	377.9
27	377.7	377.3	376.8	378.0	376.8	377.7	376.6	376.5	376.0	377.0	378.2	377.8
28	377.6	377.2	378.0	377.8	377.0	377.5	376.5	376.5	376.0	377.0	378.1	377.9
29	377.4	......	378.5	377.7	377.0	377.4	376.5	376.4	376.0	376.9	378.0	378.4
30	377.3	......	378.8	377.6	377.0	377.4	376.5	376.4	376.0	377.0	378.0	......
31	377.2	......	379.2	......	377.0	......	376.5	376.3	......	377.0	......	......

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Seneca River at Mosquito Point Bridge.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	383.6	379.5	376.8	380.6	377.9	377.8	377.3	377.6	377.2
2	......	......	......	383.4	379.3	376.7	380.5	377.9	377.8	377.3	377.6	377.4
3	......	......	......	383.2	379.2	376.7	380.4	377.9	378.0	377.5	377.7	377.6
4	......	......	......	383.0	379.1	376.6	380.2	377.9	378.1	377.5	377.7	378.0
5	......	......	......	382.9	379.0	376.6	380.1	377.8	378.0	377.5	377.6	378.3
6	......	......	......	382.7	378.9	376.7	380.0	377.8	378.0	377.4	377.6	378.3
7	......	......	......	382.5	378.9	376.8	379.8	377.8	377.9	377.4	377.7	378.2
8	......	......	......	382.4	378.8	377.2	379.7	377.8	377.9	377.4	377.7	378.2
9	......	......	......	382.2	378.7	377.3	379.6	377.7	377.8	377.4	377.8	378.3
10	......	......	......	382.0	378.6	377.3	379.4	377.7	377.7	377.4	377.8	378.4
11	......	......	......	381.8	378.5	377.3	379.3	377.7	377.7	377.5	377.8	378.5
12	......	......	......	381.7	378.4	377.4	379.2	377.8	377.8	377.9	377.8	378.5
13	......	......	......	381.6	378.3	377.4	379.1	377.8	377.7	378.1	377.7	378.4
14	......	......	......	381.5	378.3	377.4	379.2	377.9	377.8	378.1	377.6	378.2
15	......	......	......	381.3	378.2	377.3	379.2	377.9	377.8	378.1	377.5	377.9
16	......	......	......	381.1	378.2	377.3	378.2	378.7	377.8	378.0	377.5	377.8
17	......	......	......	381.0	378.1	377.2	379.1	379.0	377.8	377.9	377.5	377.8
18	......	......	......	380.9	378.0	378.4	378.9	379.1	377.8	377.9	377.5	377.7
19	......	......	......	380.7	377.9	379.4	378.7	379.1	377.8	377.9	377.4	377.6
20	......	......	......	380.5	377.8	379.9	378.6	378.9	377.9	377.9	377.3	377.5
21	......	......	......	380.4	377.7	380.2	378.5	378.7	377.9	378.0	377.3	377.9
22	......	......	......	380.4	377.6	380.6	378.4	378.5	377.8	378.1	377.2	378.4
23	......	......	380.9	380.3	377.5	380.8	378.3	378.3	377.8	378.1	377.2	378.9
24	......	......	381.6	380.2	377.4	381.0	378.3	378.1	377.7	378.0	377.1	379.2
25	......	......	382.4	380.2	377.4	381.0	378.2	378.0	377.6	377.9	377.1	379.1
26	......	......	382.9	380.1	377.3	381.1	378.1	377.8	377.5	377.8	377.1	378.9
27	......	......	383.2	380.0	377.3	381.1	378.0	377.6	377.5	377.8	377.0	378.8
28	......	......	383.5	379.9	377.2	381.0	377.9	377.5	377.4	377.7	377.0	378.7
29	......	......	383.6	379.8	377.1	380.8	377.9	377.4	377.4	377.7	377.0	378.8
30	......	......	383.7	379.7	377.0	380.7	378.0	377.6	377.3	377.6	377.1	379.2
31	......	......	383.7	......	376.9	......	378.0	377.7	......	377.6	......	......

* Low water gage defective.

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Seneca River at Mosquito Point Bridge.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	379.4	378.1	377.8	380.5	378.5	377.7	378.4	377.5	377.3	376.8	377.6	378.5
2	379.3	377.9	377.8	380.6	378.4	377.7	378.6	377.5	377.2	376.8	377.6	378.4
3	379.3	377.7	377.7	380.7	378.6	377.6	378.6	377.6	377.2	376.7	377.6	378.3
4	379.2	377.7	378.0	380.6	378.8	377.5	378.8	378.0	377.1	376.7	377.5	378.1
5	379.2	377.6	378.5	380.6	378.9	377.5	378.9	378.3	377.1	376.7	377.5	377.9
6	379.2	377.4	378.6	380.5	378.9	377.5	379.1	378.3	377.1	376.7	377.4	378.4
7	379.0	377.3	378.6	380.4	378.9	377.6	379.1	378.3	377.0	376.8	377.3	378.6
8	378.7	377.2	378.5	380.4	378.8	377.5	379.3	378.2	377.0	376.9	377.3	378.9
9	378.6	377.2	378.3	380.4	378.8	377.6	379.3	378.1	376.9	377.0	377.3	379.0
10	378.5	377.1	378.3	380.6	378.7	377.6	379.3	378.0	376.9	377.2	377.2	379.1
11	378.5	377.1	378.0	380.8	378.6	377.6	379.2	378.1	376.9	377.0	377.3	379.1
12	378.5	377.0	377.9	381.0	378.4	377.5	379.0	378.1	376.9	377.0	377.4	379.0
13	378.4	377.0	377.7	381.0	378.3	377.5	378.9	378.1	376.9	377.1	377.6	378.9
14	378.4	377.0	377.6	381.1	378.4	377.4	378.7	378.1	376.9	377.2	377.9	378.9
15	378.3	377.1	377.6	381.2	378.3	377.3	378.6	378.0	376.8	377.1	378.2	379.2
16	378.3	377.1	377.5	381.2	378.3	377.3	378.4	377.9	376.8	377.0	378.2	379.5
17	378.2	377.1	377.4	381.1	378.3	378.0	378.4	377.8	376.8	376.9	378.3	379.7
18	378.3	377.1	377.3	380.9	378.2	378.6	378.5	377.8	376.8	376.8	378.4	379.7
19	378.3	377.1	377.3	380.7	378.2	379.0	378.5	377.7	376.7	376.8	378.7	379.7
20	378.3	377.1	377.3	380.6	378.0	379.2	378.4	377.7	376.7	377.2	378.9	379.6
21	378.4	377.3	377.3	380.4	377.9	379.2	378.3	377.8	376.7	377.6	379.0	379.5
22	378.6	377.6	377.2	380.2	377.8	379.2	378.3	377.8	376.7	377.9	379.2	379.5
23	378.8	377.7	377.2	380.0	377.8	379.2	378.1	377.8	376.8	377.9	379.2	379.4
24	379.0	377.8	377.2	379.7	377.8	379.2	378.0	377.7	376.8	377.9	379.3	379.3
25	379.0	377.9	377.2	379.4	377.7	379.1	377.9	377.7	376.8	377.8	379.3	379.1
26	378.9	378.0	377.1	379.2	377.6	378.9	377.8	377.7	376.8	377.8	379.2	378.9
27	378.7	378.1	377.9	379.0	377.7	378.7	377.7	377.6	376.9	377.8	379.1	378.8
28	378.5	377.9	379.1	378.8	377.8	378.5	377.6	377.6	376.8	377.7	378.9	378.7
29	378.3	......	379.7	378.7	377.8	378.3	377.5	377.6	376.7	377.8	378.8	378.7
30	378.2	......	380.0	378.6	377.8	378.2	377.6	377.5	376.8	377.8	378.7	378.8
31	378.2	......	380.3	......	377.8	......	377.6	377.4	......	377.7	......	379.1

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Seneca River at N. Y. C. R. R. Bridge, near Fox Ridge, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	384.4	380.9	378.9	382.1	380.0	379.6	379.4	379.7	379.1
2	......	......	......	384.3	380.9	378.8	382.2	380.0	379.7	379.5	379.7	379.2
3	......	......	......	384.1	380.8	378.7	381.9	379.9	379.9	379.5	379.7	379.3
4	......	......	......	383.9	380.7	378.7	381.7	379.9	379.9	379.6	379.6	379.6
5	......	......	......	383.7	380.6	378.7	381.7	379.8	379.9	379.6	379.6	380.0
6	......	......	......	383.6	380.7	378.8	381.7	379.8	379.8	379.5	379.6	380.1
7	......	......	......	383.4	380.6	379.0	381.6	379.8	379.8	379.5	379.7	380.0
8	......	......	......	383.3	380.5	379.1	381.5	379.8	379.7	379.5	379.8	380.0
9	......	......	......	383.2	380.3	379.2	381.4	379.7	379.6	379.5	379.8	380.2
10	......	......	......	383.1	380.2	379.3	381.3	379.6	379.6	379.4	379.8	380.3
11	......	......	......	383.0	380.1	379.4	381.1	379.7	379.6	380.0	379.7	380.4
12	......	......	......	382.9	380.1	379.5	381.1	379.8	379.6	380.1	379.7	380.4
13	......	......	......	382.8	380.0	379.6	381.1	379.8	379.7	380.2	379.7	380.3
14	......	......	......	382.6	380.1	379.5	381.2	379.8	379.8	380.2	379.6	380.1
15	......	......	......	382.5	380.1	379.4	381.1	379.9	379.8	380.2	379.6	379.8
16	......	......	......	382.4	380.1	379.3	381.1	381.0	379.9	380.1	379.5	379.7
17	......	......	......	382.2	380.0	379.7	381.0	381.2	379.9	380.0	379.5	379.7
18	......	......	......	382.1	379.9	381.2	380.8	381.0	379.9	379.9	379.3	379.6
19	......	......	......	382.0	379.8	381.7	380.7	380.9	379.8	380.0	379.3	379.5
20	......	......	......	381.9	379.7	382.0	380.5	380.8	379.9	380.1	379.2	379.5
21	......	......	......	381.8	379.6	382.2	380.4	380.5	379.9	380.2	379.2	379.8
22	......	......	......	381.8	379.5	382.4	380.3	380.3	379.8	380.2	379.1	380.3
23	......	......	......	381.8	379.4	382.6	380.3	380.0	379.7	380.1	379.1	380.8
24	......	......	382.8	381.8	379.4	382.6	380.3	379.8	379.7	380.1	379.0	381.1
25	......	......	383.5	381.7	379.4	382.6	380.2	379.6	379.6	380.0	379.0	381.0
26	......	......	384.1	381.6	379.3	382.6	380.2	379.5	379.5	379.9	379.3	380.8
27	......	......	384.4	381.4	379.2	382.6	380.1	379.5	379.5	379.8	379.2	380.7
28	......	......	384.6	381.3	379.2	382.5	380.1	379.4	379.4	379.8	379.1	380.6
29	......	......	384.7	381.3	379.1	382.3	380.1	379.3	379.4	379.8	379.0	380.8
30	......	......	384.7	381.1	379.0	382.2	380.1	379.4	379.4	379.7	379.0	381.2
31	......	......	384.6	......	378.9	......	380.0	379.5	......	379.6	......	......

* Low water gage defective.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Seneca River at N. Y. C. R. R. Bridge, near Fox Ridge, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	381.5	380.0	379.7	382.0	380.3	380.2	381.1	379.9	379.4	378.9	379.7	380.5
2	381.4	379.8	379.7	382.1	380.2	380.1	381.3	379.8	379.4	378.9	379.7	380.4
3	381.4	379.6	379.6	382.1	380.5	380.0	381.4	379.8	379.4	378.8	379.7	380.3
4	381.3	379.8	380.5	382.0	380.8	380.0	381.5	380.0	379.3	378.8	379.7	380.2
5	381.3	379.7	380.4	382.0	380.9	379.9	381.6	380.5	379.3	378.7	379.7	380.3
6	381.2	379.6	380.4	381.9	380.9	379.8	381.8	380.8	379.2	378.7	379.6	380.6
7	381.0	379.6	380.3	381.8	380.8	380.0	382.0	380.7	379.1	379.0	379.6	380.9
8	380.7	379.6	380.2	381.7	380.7	380.1	382.1	380.6	379.1	379.2	379.5	380.9
9	380.6	379.6	380.1	381.7	380.7	380.2	382.2	380.5	379.1	379.1	379.5	381.0
10	380.5	379.6	379.9	381.9	380.6	380.2	382.0	380.4	379.1	379.0	379.5	381.2
11	380.5	379.5	379.8	382.2	380.5	380.2	381.8	380.3	379.0	379.2	379.7	381.3
12	380.5	379.4	379.7	382.4	380.5	380.1	381.7	380.3	379.0	379.3	379.9	381.3
13	380.4	379.3	379.6	382.5	380.4	380.1	381.5	380.3	379.0	379.5	380.1	381.2
14	380.3	379.3	379.5	382.6	380.4	380.0	381.3	380.2	378.9	379.4	380.3	381.2
15	380.2	379.3	379.4	382.6	380.3	379.9	381.1	380.2	378.9	379.3	380.4	381.4
16	380.2	379.3	379.3	382.5	380.3	379.8	380.9	380.1	378.9	379.2	380.3	381.6
17	380.1	379.4	379.2	382.4	380.2	380.2	381.0	380.0	378.8	379.1	380.4	381.8
18	380.2	379.4	379.2	382.2	380.2	381.3	381.1	379.9	378.8	379.1	380.6	381.9
19	380.2	379.4	379.2	382.0	380.1	381.6	381.0	379.9	378.8	379.0	380.8	381.9
20	380.2	379.4	379.2	381.9	380.1	381.7	380.9	379.8	378.7	379.5	381.0	381.8
21	380.3	379.5	379.3	381.7	380.1	381.8	380.7	379.8	378.7	380.0	381.1	381.7
22	380.5	379.6	379.5	381.5	380.0	381.8	380.6	380.0	378.6	380.2	381.2	381.6
23	380.7	379.7	379.4	381.4	380.0	381.7	380.5	379.9	378.9	380.1	381.3	381.5
24	380.9	379.7	379.3	381.2	380.0	381.6	380.4	379.8	379.0	380.0	381.4	381.5
25	380.9	380.0	379.2	380.9	379.9	381.4	380.2	379.7	379.1	380.1	381.2	381.4
26	380.8	380.0	379.1	380.8	379.9	381.3	380.2	379.7	379.0	380.0	381.1	381.3
27	380.6	379.9	379.7	380.7	380.0	381.2	380.1	379.7	379.0	379.9	380.9	381.3
28	380.4	379.8	381.0	380.5	380.2	381.0	380.1	379.6	378.9	380.1	380.8	381.2
29	380.2	......	381.5	380.5	380.3	380.9	380.0	379.6	378.9	379.9	380.7	381.2
30	380.1	......	381.7	380.4	380.3	380.9	380.0	379.5	378.9	379.9	380.6	381.5
31	380.1	......	381.9	......	380.2	......	379.9	379.5	......	379.7	......	381.6

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Seneca River at West Mud Lock.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	383.4	382.6
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	383.3	382.0
3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	383.9	382.6
4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	383.3	382.7
5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	383.3	382.7
6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	383.3	383.0
7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	383.2	382.9
8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	383.2	383.0
9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	383.2	383.0
10	.....	.....	.....	.....	.....	.....	.....	.....	.....	384.0	383.1	382.9
11	.....	.....	.....	.....	.....	.....	.....	.....	.....	383.9	383.1	382.9
12	.....	.....	.....	.....	.....	.....	.....	.....	.....	384.0	383.1	382.8
13	.....	.....	.....	.....	.....	.....	.....	.....	.....	383.9	383.0	383.0
14	.....	.....	.....	.....	.....	.....	.....	.....	.....	384.0	383.0	382.9
15	.....	.....	.....	.....	.....	.....	.....	.....	.....	384.0	384.0	383.0
16	.....	.....	.....	.....	.....	.....	.....	.....	.....	384.0	383.1	382.9
17	.....	.....	.....	.....	.....	.....	.....	.....	.....	384.0	383.1	382.8
18	.....	.....	.....	.....	.....	.....	.....	.....	.....	384.2	383.0	382.9
19	.....	.....	.....	.....	.....	.....	.....	.....	.....	384.1	383.0	382.8
20	.....	.....	.....	.....	.....	.....	.....	.....	.....	384.0	382.9	382.8
21	.....	.....	.....	.....	.....	.....	.....	.....	.....	383.9	382.9	383.0
22	.....	.....	.....	.....	.....	.....	.....	.....	.....	384.0	383.0	383.2
23	.....	.....	.....	.....	.....	.....	.....	.....	.....	383.9	382.9	383.3
24	.....	.....	.....	.....	.....	.....	.....	.....	.....	383.8	382.9	383.2
25	.....	.....	.....	.....	.....	.....	.....	.....	.....	383.8	382.8	383.2
26	.....	.....	.....	.....	.....	.....	.....	.....	.....	383.9	382.8	383.3
27	.....	.....	.....	.....	.....	.....	.....	.....	.....	383.8	382.7	383.2
28	.....	.....	.....	.....	.....	.....	.....	.....	.....	383.6	383.6	383.2
29	.....	.....	.....	.....	.....	.....	.....	.....	.....	383.5	382.7	383.3
30	.....	.....	.....	.....	.....	.....	.....	.....	.....	383.5	382.7	383.4
31	.....	.....	.....	.....	.....	.....	.....	.....	.....	383.5	.....	383.3

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Seneca River at West Mud Lock. *

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	383.2	383.2	382.7	383.5	383.9	383.3	384.0	384.1	384.0	383.2	383.1	383.0
2	383.3	383.3	382.7	383.7	383.6	383.4	383.9	384.0	383.9	383.3	383.2	382.9
3	383.2	383.1	382.6	383.9	383.6	383.3	383.8	383.9	383.9	383.4	383.1	383.0
4	382.0	383.0	382.7	384.0	383.7	383.4	383.9	383.9	384.0	383.3	383.0	382.9
5	381.7	382.9	382.8	383.9	383.6	383.3	384.0	383.8	384.0	383.2	383.0	383.0
6	382.9	382.8	382.9	383.9	383.7	383.2	384.1	383.9	383.8	383.3	383.1	383.0
7	383.3	382.8	382.8	383.8	383.8	383.3	384.1	384.0	383.8	383.4	383.3	383.0
8	383.2	382.7	382.7	383.9	383.6	383.2	384.2	384.0	383.7	383.3	383.2	383.1
9	383.3	382.7	382.8	384.0	383.7	383.3	384.2	384.1	383.8	383.2	383.1	383.1
10	383.4	382.8	382.7	384.1	383.6	383.3	384.3	384.1	383.7	383.3	383.0	383.2
11	383.3	382.8	382.8	384.2	383.5	383.2	384.2	384.0	383.6	383.4	383.0	383.2
12	383.2	382.7	382.8	384.3	383.6	383.3	384.3	384.0	383.8	383.5	383.1	383.3
13	383.1	382.6	382.6	384.3	383.5	383.4	384.3	383.9	383.7	383.3	383.2	383.4
14	383.2	382.5	382.5	384.5	383.4	383.3	384.2	383.9	383.8	383.2	383.1	383.4
15	383.1	382.5	382.7	384.4	383.6	383.3	384.3	384.0	383.7	383.2	383.1	383.5
16	382.9	382.5	382.6	384.3	383.6	383.2	384.2	383.9	383.7	383.1	383.2	383.6
17	383.0	382.6	382.5	384.3	383.5	383.4	384.3	383.9	383.6	383.0	383.1	383.7
18	382.8	382.4	382.5	384.4	383.5	383.6	384.4	383.8	383.6	383.1	383.0	383.7
19	383.2	382.4	382.5	384.4	383.4	383.7	384.3	383.9	383.7	383.0	383.1	383.9
20	383.0	382.5	382.5	384.3	383.4	383.8	384.2	384.0	383.5	382.9	383.2	384.0
21	383.1	382.4	382.6	384.2	383.3	383,9	384.1	384.0	383.6	383.1	383.3	383.9
22	383.3	382.5	382.6	384.1	383.1	384.0	384.1	384.1	383.6	383.2	383.3	383.9
23	383.2	382.6	382.5	383.8	383.0	384.0	384.0	384.1	383.7	383.4	383.4	383.8
24	383.1	382.7	382.5	383.8	383.1	383.9	383.9	384.0	383.7	383.6	383.3	383.8
25	383.0	383.0	382.5	383.8	383.1	383.9	383.9	384.1	383.8	383.5	383.2	383.7
26	383.1	383.0	382.7	383.6	383.2	383.8	384.0	384.3	383.7	383.4	383.1	383.7
27	383.2	382.9	382.9	383.8	383.2	383.9	383.9	384.2	383.6	383.4	382.9	383.5
28	383.1	382.8	383.1	383.7	383.3	383.8	383.9	384.0	383.5	383.4	382.8	383.6
29	383.0	......	383.2	383.7	383.2	383.9	384.0	384.0	383.4	383.3	383.0	383.7
30	383.3	......	382.1	383.8	383.3	384.0	384.0	384.1	383.2	383.3	383.0	383.8
31	383.0	......	382.1	......	383.4	......	384.1	384.0	......	383.2	......	383.9

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Clyde River at Sodus St. Bridge, Clyde, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.6	381.9
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.7	382.0
3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.7	382.0
4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.6	382.2
5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.6	382.2
6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.7	382.2
7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	382.0	382.2
8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.9	382.2
9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.9	382.4
10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.9	382.5
11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.8	382.5
12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.7	382.6
13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.7	382.4
14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.7	382.2
15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.7	381.8
16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.7	382.4
17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.7	381.8
18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.7	381.7
19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.7	381.7
20	.....	.....	.....	.....	.....	.....	.....	.....	.....	382.0	381.7	381.7
21	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.9	381.7	381.8
22	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.8	381.6	383.5
23	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.8	381.5	383.7
24	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.7	381.5	383.2
25	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.6	381.5	383.1
26	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.6	381.5	383.0
27	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.6	381.5	382.3
28	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.6	381.5	382.1
29	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.5	381.7	382.5
30	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.6	381.8	384.0
31	.....	.....	.....	.....	.....	.....	.....	.....	.....	381.7	.....	.....

* Low water gage defective.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Clyde River at Sodus St. Bridge, Clyde, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	383.20	382.30	382.80	387.20	382.30	382.70	384.70	382.30	382.30	382.50	382.6	382.60
2	382.90	382.10	382.80	386.90	382.3	382.6	384.6	382.2	382.3	382.4	382.6	382.5
3	382.90	382.60	382.60	386.10	383.1	382.5	384.2	382.3	382.3	382.8	382 6	382.3
4	383.10	382.50	384.10	385.20	383.4	382.4	385.4	383.0	382.3	382.3	382.6	382.5
5	382.70	382.30	384.60	384.80	383.2	382.4	386.0	383.1	382.3	382.8	382.6	382.2
6	383.50	382.20	383.80	384.70	383.1	382.5	386.4	383.0	382.2	382.3	382.5	382.7
7	382.80	382.10	383.10	384.70	383.0	382.5	386.5	382.7	382.2	382.5	382.5	384.6
8	383.60	382.10	382.70	384.20	382.9	382.6	385.8	382.6	382.2	382.7	382.5	384.6
9	383.30	382.10	382.60	384.20	382.8	382.5	385.0	382.5	382.2	382.6	382.5	384.7
10	383.20	382.10	382.50	385.70	382.7	382.5	384.3	382.7	382.3	382.5	382.4	384.9
11	383.20	382.00	382.40	386.60	382.6	382.7	384.1	382.8	382.2	382.5	382.5	384.8
12	382.80	382.00	382.30	387.50	382.6	382.5	383.7	382.9	382.2	382.9	382.8	384.7
13	382.70	382.00	382.30	387.30	382.5	382.4	383.3	382.7	382.2	382.8	383.7	384.6
14	382.40	382.00	382.20	386.50	382.6	382.3	383.1	382.6	382.2	382.6	384.0	384.5
15	382.40	382.10	382.20	385.60	382.7	382.2	382.9	382.6	382.2	382.6	384.0	384.5
16	382.40	382.10	382.20	385.10	382.8	382.2	382.8	382.5	382.2	382.5	383.8	385.3
17	382.40	382.10	382.00	384.60	382.6	383.2	383.7	382.4	382.2	382.5	383.6	385.9
18	382.40	382.10	382.00	384.20	382.6	385.1	383.4	382.4	382.2	382.4	383.7	385.9
19	382.60	382.10	382.00	384.10	382.6	385.6	382.9	382.4	382.1	382.4	384.9	385.1
20	382.60	382.10	382.00	383.10	382.6	385.7	382.7	382.4	382.1	383.4	385.2	384.2
21	382.70	382.30	382.00	383.60	382.5	385.0	382.5	382.7	382.2	383.9	384.5	383.9
22	383.40	382.80	382.00	383.40	382.4	385.0	382.7	382.6	382.3	383.4	384.6	383.9
23	383.60	382.80	382.00	383.10	382.6	384.9	382.6	382.6	382.3	383.0	384.7	383.9
24	383.30	382.70	382.00	382.70	382.4	384.7	382.5	382.4	382.4	382.9	384.8	384.0
25	382.90	382.80	381.90	382.60	382.4	384.2	382.4	382.3	382.3	382.7	384.4	384.1
26	382.50	383.20	382.30	382.60	382.3	383.8	382.3	382.3	382.3	382.9	383.8	384.1
27	382.40	382.70	383.80	382.50	382.8	383.4	382.3	382.5	382.3	382.8	383.4	384.2
28	382.30	382.40	386.10	382.40	383.1	383.1	382.3	382.4	382.2	382.7	383.1	384.0
29	382.10	......	387.10	382.30	383.0	383.2	382.3	382.4	382.2	382.7	382.9	384.2
30	382.10	......	387.50	382.30	382.9	384.1	382.2	382.4	382.3	382.7	382.7	383.8
31	382.10	......	387.30	......	382.8	......	382.3	382.9	......	382.6	......	384.0

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Clyde River at Geneva St. Bridge, Lyons, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	391.3	391.5	392.1
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	391.3	391.5	391.8
3	.....	.....	.....	.....	.....	.....	.....	.....	.....	392.2	391.2	391.8
4	.....	.....	.....	.....	.....	.....	.....	.....	.....	392.3	391.5	392.1
5	.....	.....	.....	.....	.....	.....	.....	.....	.....	392.1	391.6	391.5
6	.....	.....	.....	.....	.....	.....	.....	.....	.....	391.8	391.5	391.7
7	.....	.....	.....	.....	.....	.....	.....	.....	.....	392.2	392.3	392.0
8	.....	.....	.....	.....	.....	.....	.....	.....	.....	391.2	392.0	392.3
9	.....	.....	.....	.....	.....	.....	.....	.....	.....	391.4	391.9	392.7
10	.....	.....	.....	.....	.....	.....	.....	.....	.....	391.1	391.8	392.7
11	.....	.....	.....	.....	.....	.....	.....	.....	.....	391.6	391.6	392.1
12	.....	.....	.....	.....	.....	.....	.....	.....	.....	392.8	391.5	392.5
13	.....	.....	.....	.....	.....	.....	.....	.....	.....	392.5	391.4	392.0
14	.....	.....	.....	.....	.....	.....	.....	.....	.....	392.3	391.6	391.8
15	.....	.....	.....	.....	.....	.....	.....	.....	.....	392.2	391.5	391.5
16	.....	.....	.....	.....	.....	.....	.....	.....	.....	391.9	391.5	391.5
17	.....	.....	.....	.....	.....	.....	.....	.....	.....	391.6	391.6	391.4
18	.....	.....	.....	.....	.....	.....	.....	.....	.....	391.4	391.5	391.1
19	.....	.....	.....	.....	.....	.....	.....	.....	.....	392.4	391.4	391.2
20	.....	.....	.....	.....	.....	.....	.....	.....	.....	392.6	391.1	391.2
21	.....	.....	.....	.....	.....	.....	.....	.....	.....	392.5	391.2	392.0
22	.....	.....	.....	.....	.....	.....	.....	.....	.....	392.5	391.1	393.8
23	.....	.....	.....	.....	.....	.....	.....	.....	.....	391.8	391.1	393.6
24	.....	.....	.....	.....	.....	.....	.....	.....	.....	391.9	391.5	393.2
25	.....	.....	.....	.....	.....	.....	.....	.....	.....	391.6	391.5	393.1
26	.....	.....	.....	.....	.....	.....	.....	.....	.....	391.3	391.2	392.1
27	.....	.....	.....	.....	.....	.....	.....	.....	391.6	391.7	391.1	391.9
28	.....	.....	.....	.....	.....	.....	.....	.....	391.3	391.7	391.1	391.7
29	.....	.....	.....	.....	.....	.....	.....	.....	391.3	391.3	391.5	392.8
30	.....	.....	.....	.....	.....	.....	.....	.....	391.3	391.5	391.8	394.1
31	.....	.....	.....	.....	.....	.....	.....	.....	.....	391.5	.....	.....

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Clyde River at Geneva St. Bridge, Lyons, N. Y.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	392.50	392.10	391.80	397.10	391.60	392.70	394.90	392.30	392.00	392.00	392.40	393.0
2	392.20	392.40	391.70	395.50	391.7	392.7	394.4	392.2	392.2	391.9	392.6	392.7
3	392.20	392.50	391.60	394.50	393.1	392.5	395.2	392.3	392.2	391.8	392.6	392.8
4	393.40	391.90	394.70	394.10	392.9	392.4	398.0	393.6	391.9	391.7	392.4	392.4
5	393.50	391.80	393.90	394.30	392.9	392.9	398.2	393.1	391.9	391.6	392.2	392.7
6	393.20	391.60	393.30	394.50	392.9	393.1	397.2	392.8	391.9	391.7	392.2	393.1
7	393.10	391.50	392.80	394.10	392.9	392.4	395.1	392.9	391.9	392.5	392.2	396.5
8	392.30	391.50	392.60	393.60	392.8	392.6	394.3	392.6	391.9	392.3	......	395.7
9	392.00	391.60	392.50	393.60	392.7	392.3	393.7	392.5	392.0	392.1	392.2	395.0
10	392.20	391.50	392.60	398.20	392.5	392.5	393.7	392.7	392.0	392.0	392.1	394.6
11	391.90	391.60	392.10	398.40	392.2	392.6	393.5	393.1	391.9	392.0	392.5	394.5
12	391.90	391.50	392.30	397.40	392.3	392.4	393.3	393.1	391.5	392.7	393.0	394.3
13	391.90	391.30	392.10	395.90	392.1	392.1	392.9	393.0	391.7	392.6	393.8	393.9
14	391.70	391.60	392.00	394.60	392.6	392.1	392.9	392.8	391.8	392.5	393.7	393.5
15	391.70	391.60	391.80	394.10	392.6	392.1	392.9	392.5	391.7	392.3	393.6	395.0
16	392.00	391.50	391.70	393.60	392.6	393.1	393.1	392.4	391.7	392.1	393.5	396.7
17	392.30	391.50	391.70	393.30	392.6	395.0	393.6	392.2	391.7	391.7	393.2	396.2
18	392.00	391.50	391.60	393.10	392.5	396.4	393.0	392.2	391.5	391.9	393.7	394.3
19	392.10	391.40	391.50	392.90	392.5	396.7	392.6	392.2	391.8	391.9	395.5	393.1
20	392.00	391.40	391.40	392.70	392.5	395.8	392.5	392.3	391.9	393.7	395.7	393.0
21	392.90	392.30	391.30	392.50	392.5	395.0	392.6	393.2	391.5	393.8	395.0	392.8
22	393.70	392.90	391.40	392.30	392.5	395.0	392.7	392.6	391.7	393.2	396.3	392.7
23	393.70	392.50	391.40	392.10	392.6	394.9	392.5	392.4	392.0	392.7	395.8	392.5
24	393.20	392.60	391.40	392.00	392.6	394.3	392.5	392.3	391.9	392.6	395.2	392.3
25	392.50	393.00	391.40	391.91	392.5	393.8	392.4	392.1	391.8	392.5	394.3	392.0
26	392.40	393.30	391.50	391.80	392.5	393.4	392.4	392.1	391.7	392.8	393.7	392.4
27	392.30	391.80	396.20	391.70	393.0	393.1	392.2	392.3	391.8	392.8	393.4	392.5
28	392.00	391.70	398.60	391.60	393.1	393.9	392.3	392.2	391.7	392.4	393.4	392.3
29	391.70	......	398.40	391.60	393.1	394.0	392.3	392.0	391.7	392.5	393.3	392.6
30	391.70	......	397.30	391.60	393.0	395.1	392.2	392.0	392.3	392.5	393.1	392.8
31	392.10	......	397.90	......	392.8	......	392.3	392.0	......	392.3	......	394.5

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Ganargua Creek at Highway Bridge, north of Newark, N. Y.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	409.0	408.3	408.4	412.7	408.3	407.9	410.1	407.9	407.1	418.2	408.7	409.1
2	408.8	408.1	408.2	410.9	408.5	407.8	409.4	407.6	407.0	408.0	408.8	409.3
3	408.5	408.3	408.5	409.0	409.0	407.8	409.0	407.8	406.7	407.9	408.9	409.5
4	409.3	408.2	410.3	409.6	408.9	407.8	411.1	408.1	407.3	407.9	408.8	409.7
5	409.7	408.1	410.0	410.1	409.0	407.8	413.5	408.3	407.8	407.8	408.7	409.4
6	409.2	408.1	409.7	410.1	408.5	407.9	412.2	408.5	407.6	407.9	408.6	409.2
7	409.2	408.1	409.4	410.2	408.5	407.8	410.6	408.4	407.7	408.5	408.5	412.2
8	409.1	408.0	409.0	409.5	408.4	407.8	409.0	408.3	407.8	408.7	408.5	412.7
9	408.8	407.9	408.9	410.4	408.5	407.8	409.0	408.1	407.7	408.4	408.5	410.6
10	408.6	407.9	408.8	412.9	408.4	407.7	409.0	408.2	407.5	408.2	408.4	410.3
11	408.4	407.9	408.6	413.9	408.4	407.7	408.7	408.4	407.3	408.6	408.5	410.1
12	408.3	407.9	408.3	412.6	408.3	407.7	408.5	408.3	407.3	408.8	409.3	409.9
13	408.3	408.0	408.5	411.9	408.4	407.6	408.5	408.2	407.4	408.7	410.5	409.7
14	408.3	408.2	408.6	410.0	408.6	407.6	408.4	408.1	407.4	408.7	410.3	409.6
15	408.3	408.2	408.5	409.8	408.5	407.7	408.1	408.0	407.3	408.5	410.2	410.2
16	408.7	408.2	408.4	409.5	408.4	407.9	408.0	408.0	407.4	408.4	410.0	411.6
17	408.7	408.2	408.2	409.3	408.4	410.7	408.2	407.9	407.4	408.3	409.7	411.7
18	408.6	408.2	408.4	409.1	408.4	412.1	408.2	407.8	407.4	408.2	409.9	410.8
19	408.6	408.3	408.3	408.9	408.3	411.4	408.1	407.7	407.3	408.0	412.7	409.8
20	400.5	408.2	408.2	408.7	408.2	410.3	408.0	407.9	407.5	409.6	412.1	409.1
21	409.2	409.4	408.1	408.6	408.1	408.8	407.9	408.0	407.6	409.9	411.2	409.1
22	409.5	409.7	408.1	408.6	408.0	408.8	407.9	407.9	407.8	409.2	411.4	409.0
23	409.7	409.4	408.1	408.5	408.0	408.9	407.9	407.7	408.0	409.0	411.6	408.8
24	409.4	409.2	408.1	408.5	407.9	408.9	407.8	407.6	408.0	408.9	411.7	408.7
25	408.8	409.3	408.2	408.4	407.8	408.6	407.8	407.5	407.9	408.9	411.9	408.8
26	408.6	409.0	408.4	408.3	407.7	408.4	407.7	407.5	407.9	409.2	410.8	408.8
27	408.4	408.9	410.6	408.3	408.1	408.3	407.7	407.7	408.2	408.9	409.5	408.8
28	408.3	408.9	414.3	408.2	408.7	408.3	407.7	407.6	408.0	408.8	409.4	408.8
29	408.2	......	413.7	408.1	408.8	408.4	407.6	407.5	407.9	408.7	409.3	408.9
30	408.2	......	412.0	408.2	408.7	410.6	407.7	407.4	408.1	408.6	409.2	409.4
31	408.4	......	412.7	......	408.2	......	407.5	407.3	......	408.7	......	410.0

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* Gage defective.

SENECA RIVER AT BALDWINSVILLE, ONONDAGA COUNTY, N. Y.

This station was established November 12, 1898.* It is maintained by U. S. Geological Survey in co-operation with this Department. The gaging station is located at the State dam in Baldwinsville, 12.5 miles along river from the junction of Seneca river with Oneida river. These two streams unite at Three River Point to form Oswego river.

Seneca river receives the drainage from the central group of lakes lying southward from Lake Ontario. The drainage basin is rolling, though not precipitous, excepting for the deep, narrow valleys crossing it, in which the lakes are situated, and certain additional valleys not at the present time occupied by lakes.

The location of the gaging station is shown on the Baldwinsville sheet, United States Geological Survey Topographic map.

The gaging record at Baldwinsville includes the discharge over the main dam, which is calculated by the formula for a broad, flat-crested weir when flash-boards are removed. Discharge over flash-boards is calculated by the Francis formula. Gage readings in the river channel below the dam are utilized to determine the average working head on turbines. Discharge through the three main canals is determined from records of the run of waterwheels, kept in each mill, and from the recorded lockage and opening of paddles at the Oswego canal lock at the foot of the canal.

Current-meter measurements, to determine the leakage of the several mills, have been made during 1906, as in preceding years.

Mean Daily Discharge, Second-feet, of Seneca River at Baldwinsville, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	4,471	3,474	3,028	5,402	3,984	3,434	2,936	2,131	1,996	2,304	3,444	3,957
2	4,448	3,248	2,902	5,924	3,928	3,237	3,658	2,096	1,609	2,263	3,294	3,659
3	4,026	2,229	3,050	5,940	3,989	2,978	3,508	2,106	2,251	2,198	3,277	4,025
4	4,240	2,669	2,993	6,091	4,179	3,336	3,305	2,073	1,994	2,201	2,937	3,476
5	4,520	3,276	3,823	6,107	4,421	3,137	3,745	1,951	1,981	2,259	3,345	3,004
6	4,394	2,759	3,889	6,083	3,733	3,137	3,571	2,728	1,984	2,493	3,265	3,476
7	3,399	2,681	3,889	5,966	4,493	3,148	3,415	2,670	1,978	1,609	3,218	4,162
8	3,670	2,609	3,777	5,272	4,352	3,148	3,246	2,670	1,887	2,471	3,123	3,945
9	3,397	2,475	3,744	5,690	4,233	3,241	3,759	2,508	1,472	2,655	3,017	3,097
10	3,126	2,491	3,770	6,124	4,288	2,778	3,680	2,508	1,978	2,709	3,062	3,609
11	3,139	1,875	3,203	6,087	4,131	3,256	3,635	2,356	1,994	2,606	2,665	3,667
12	3,156	2,434	3,583	6,310	4,006	3,215	3,548	1,950	2,032	2,603	3,199	3,633

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*By Geo. W. Rafter, for the Water-Supply Division of the U. S. Board of Engineers on Deep Waterways.

Mean Daily Discharge, Second-feet, of Seneca River at Baldwinsville, N. Y.—Concluded.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
13	3,251	2,491	3,409	6,310	3,617	3,111	3,398	2,440	2,032	2,606	3,452	3,666
14	3,127	2,491	3,220	6,352	4,133	3,097	3,205	2,381	2,032	2,232	3,494	4,283
15	3,454	2,441	3,029	5,999	4,018	2,977	2,886	2,251	1,909	2,708	3,705	4,160
16	3,472	2,424	3,281	6,629	4,103	2,968	3,135	2,251	1,342	2,645	3,867	4,319
17	3,522	2,494	3,031	6,505	4,133	3,118	3,163	2,183	2,016	2,576	3,850	4,840
18	3,572	2,134	2,628	6,375	3,991	3,979	2,988	2,107	2,002	2,568	3,635	4,857
19	3,572	2,651	2,976	6,245	3,910	4,205	2,837	1,771	2,032	2,533	4,139	4,857
20	3,535	2,461	2,876	6,121	3,252	4,233	3,020	2,121	2,032	2,733	4,327	4,655
21	3,287	2,742	2,646	5,918	3,777	4,233	2,875	2,311	2,032	2,485	4,381	4,645
22	3,826	3,005	2,719	5,142	3,734	4,279	2,519	2,300	1,909	3,120	4,649	4,670
23	3,884	3,107	2,878	5,485	3,731	4,184	2,841	2,267	1,502	3,293	4,730	3,937
24	4,061	3,435	2,773	5,311	3,460	3,817	2,561	2,210	2,067	3,343	4,955	4,224
25	4,006	3,331	2,473	5,116	3,460	4,122	2,613	2,117	2,084	3,393	4,703	3,636
26	3,851	3,695	2,743	4,717	3,210	4,178	2,487	1,703	2,084	3,343	4,595	3,657
27	3,888	3,730	3,574	4,516	3,027	3,768	2,164	2,345	2,007	3,258	4,755	3,473
28	3,438	3,253	4,287	4,605	3,337	3,563	2,134	2,011	2,115	2,910	4,633	3,528
29	3,490	......	4,922	3,645	3,554	3,373	1,708	2,011	2,004	3,429	4,571	3,720
30	3,413	......	5,227	4,334	3,415	3,331	2,309	1,989	1,532	3,443	4,395	3,651
31	3,313	......	5,563	......	3,348	......	2,203	1,989	......	3,393	......	4,237
Mean	3,676	2,789	3,416	5,494	3,837	3,486	3,002	2,210	1,930	2,719	3,823	3,961

Monthly Discharge of Seneca River at Baldwinsville, N. Y.
[Drainage area, 3,103 square miles.*]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1906.					
January	4,520	3,126	3,676	1.184	1.365
February	3,730	1,875	2,789	.898	.935
March	5,563	2,473	3,416	1.100	1.268
April	6,629	3,645	5,494	1.769	1.974
May	4,493	3,027	3,837	1.235	1.424
June	4,279	2,778	3,486	1.122	1.252
July	3,759	1,708	3,002	.967	1.115
August	2,728	1,703	2,210	.712	.821
September	2,251	1,342	1,930	.621	.693
October	3,443	1,609	2,719	.876	1.010
November	4,955	2,665	3,823	1.231	1.374
December	4,857	3,064	3,961	1.275	1.470
The year	....	....	....	....	14.701

*Area, 3,121 from later maps, but 3,103 is used here to agree with former reports.

SKANEATELES LAKE OUTLET AT WILLOW GLEN, N. Y.

Skaneateles lake outlet enters Seneca river above Cross lake, crossing the Erie canal at Jordan. The fall from the foot of the lake to this point is 465 feet.

The surface of the lake has an elevation of 865 feet above tide. The valley on each side of the lake has an average width of 2.5 miles, and in this distance there is a rise of 400 to 800 feet, the greater part of it being within a mile of the lake. The inflow to the lake is through numerous short lateral feeders flowing down these slopes. The drainage areas of the lake are shown below:

*Drainage areas of Skaneateles Lake.**

	Square miles.
Land surface above State dam at Skaneateles	60.25
Water-surface of lake at Skaneateles	12.75
Total drainage area above foot of lake (water-surface = 17.46 per cent)	73.00
Total area above Willow Glen weir	74.25
Area above Erie canal at Jordan	93.00

The station was established March 10, 1895. It is located in the village of Willow Glen, 1.5 miles below the foot of Skaneateles lake.

Observation is made of the daily discharge over a thin-edged weir, having a crest length of 27 feet, with two end contractions. The discharge is calculated from the observed depth on a stake set with its top at crest level, 5.2 feet up-stream from the weir, by means of the Francis formula, including corrections for end contractions and velocity of approach.

Since July 1, 1894, the water-supply of the city of Syracuse has been drawn from Skaneateles lake, and the amount of this diversion should be added to the discharge over Willow Glen weir to obtain the total run-off of the drainage basin. The calculated diversion, as determined from the record of gate openings and head at the inlet gates, using the formula for orifices with a constant coefficient stated as 0.62, has been furnished by the city of Syracuse. The observations at the weir and gates were taken by Edward Conron.

A complete description of earlier gagings of this stream is contained in the report of the State Engineer of New York, supplement for 1902, pages 61–76.

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* Areas here given have been taken from proceedings in condemnation of water-powers on Skaneateles outlet. The lake and its tributary area are shown on the Skaneateles, Tully, Cortland and Moravia topographic atlas sheets of the United States Geological Survey.

Mean Daily Discharge, Second-feet, of Skaneateles Lake Outlet at Willow Glen, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	30	34	30	34	72	67	67	67	70	67	57	57
2	30	32	30	30	77	67	67	77	70	67	57	57
3	30	32	34	30	83	67	67	77	72	57	57	57
4	32	32	30	34	77	67	67	100	70	57	57	57
5	34	30	30	34	77	67	67	88	70	57	57	57
6	32	30	30	34	77	70	67	88	70	57	57	67
7	30	32	30	32	77	67	67	88	70	57	57	67
8	30	34	30	32	67	70	67	88	70	57	57	60
9	30	32	30	38	71	67	67	88	70	57	57	60
10	30	30	30	38	67	70	67	77	70	57	57	60
11	30	30	30	36	67	67	67	77	70	57	60	60
12	30	30	30	34	67	67	67	77	70	57	60	60
13	30	30	30	34	70	67	67	77	67	57	60	60
14	30	30	30	34	67	67	67	77	67	57	60	60
15	30	30	30	38	67	67	67	77	67	57	60	60
16	30	30	30	36	67	70	67	77	67	57	60	57
17	30	30	30	34	67	72	70	77	67	57	62	57
18	30	30	32	34	67	72	67	77	67	57	62	57
19	30	30	34	34	67	70	67	72	67	60	60	57
20	30	30	32	34	67	67	67	83	67	57	60	60
21	30	30	30	34	67	67	67	77	67	60	57	57
22	30	30	30	34	67	67	67	72	67	57	57	57
23	32	30	30	34	67	67	67	72	70	57	57	57
24	32	30	30	34	67	67	67	72	67	57	57	57
25	32	32	30	34	67	67	67	72	67	57	57	57
26	32	30	30	34	67	67	67	70	67	57	57	57
27	32	30	34	34	70	67	67	70	67	57	57	57
28	32	30	34	34	70	67	67	70	67	57	57	30
29	32	......	32	34	67	67	67	70	67	57	57	30
30	32	......	36	62	67	67	67	70	67	57	57	38
31	32	......	38	......	67	......	67	70	......	57	......	41
Mean	30.9	30.8	31.2	35.1	69.8	67.8	67.1	77.1	68.4	58.0	58.2	55.7

Monthly Discharge of Skaneateles Lake Outlet at Willow Glen, N. Y.
[Drainage area, 74 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.*	
	In outlet.	Through conduit.	Total.	Second-feet per square mile.	Depth in inches.
1905.					
August	62.8	18.4	81.2	1.09	1.26
September	76.7	18.6	95.3	1.28	1.43
October	92.2	18.6	110.8	1.49	1.72
November	89.5	17.7	107.2	1.44	1.61
December	58.8	17.8	76.6	1.03	1.19
1906.					
January	30.9	18.1	49.0	.657	.758
February	30.8	19.7	50.5	.677	.704
March	31.2	19.7	50.9	.682	.782
April	35.1	19.4	54.5	.730	.810
May	69.8	19.2	89.0	1.19	1.37
June	67.8	19.2	87.0	1.17	1.31
July	67.1	19.2	86.3	1.16	1.34
August	77.1	18.9	96.0	1.29	1.49
September	68.4	18.6	87.0	1.17	1.31
October	58.0	18.6	76.6	1.03	1.19
November	58.2	18.6	76.8	1.03	1.15
December	55.7	....	....	....	....

* Includes diversion for water-supply to Syracuse, N. Y.

NOTE.—Record through January, February and March affected slightly by ice. On account of slight change in conditions at weir, records for 1906 are approximate.

SENECA RIVER AT HIGHWAY BRIDGE ABOVE CROSS LAKE, ONONDAGA COUNTY, N. Y.

A gage was erected May 1, 1904, by H. U. Lyon of this Department at the highway bridge, commonly known as " Iron Bridge," over the Seneca river about one-half mile above Cross lake, for the purpose of obtaining a record of the fluctuation of the water-surface of the river at this point and of Cross lake. The elevation of water-surface is practically the same, there being very little appreciable slope in the river between the lake and the gaging station, except, perhaps, in time of high water.

The gage is a vertical board, graduated in feet and tenths, and is fastened to a willow tree on bank of river, on up-stream side of bridge, about 20 feet from south abutment, with its zero mark at elevation 373.30, Barge canal datum. Observations of the stage of the stream are taken daily by Ed. Carlton.

Current-meter measurements were made at this station in 1905.

The current of the stream is sluggish, especially during low water, but quite uniform. The river channel is of mud and straight for a considerable distance each way from the bridge.

The drainage basin of the Seneca river is described for the station at Baldwinsville. The drainage area above the station at Cross lake is 78 square miles less than at Baldwinsville.

Current Meter Discharge Measurements of Seneca River at Bridge above Cross Lake.

DATE.	Hydrographer.	Gage height.	Elevation of water-surface.	Width.	Area of section.	Mean velocity.	Discharge.
		Feet.		*Feet.*	*Square feet.*	*Feet per second.*	*Second-feet.*
1905.							
Sept. 21	....	3.2	379.7	341	4,771	0.31	1,472
Oct. 28	....	3.2	379.7	341	4,771	0.52	2,475
1906.							
May 4	C. A. Poole..........	4.3	380.8	322	5,067	0.70	3,564

CLYDE RIVER AT CLYDE, WAYNE COUNTY, N. Y.

This gaging station, which is located at the Sodus street bridge in the village of Clyde, was established October 20, 1905, by E. V. R. Payne of this Department. The gage is of the weight-and-chain type and is attached to the railing at center of bridge on down-stream side. The datum to which all gage readings are added is 380.0, which is the elevation of bottom of weight when the end of chain is opposite the zero of the gage. Observations of the stage of the stream are taken each day by J. F. Wickham. The length of the gage chain from point of weight to marker is 22.09 feet.

Several current-meter measurements have been made here since the gage was established, but not in sufficient number or range to make a rating table from which to estimate the daily discharge. The meter measurements are made from the bridge, which consists of three spans, with a total length of 174 feet between abutments. The cross-section of the channel under the bridge is fairly uniform; the bed is of gravel with some boulders which do not, however, materially affect the uniformity of the flow. The river channel is straight for a considerable distance each way from the bridge.

The Clyde river, a tributary of the Seneca river, is formed by the junction of Canandaigua outlet and Ganargua creek at Lyons. The latter stream rises in the southern part of Ontario county and flows first north and then east, draining a narrow and hilly territory to the west of Canandaigua lake and the flat and marshy lands to the north thereof. The drainage area of this creek above Lyons is 299.2 square miles and that of Canandaigua outlet above the same point is 444.1 square miles. The flow of the latter stream is influenced by storage in Canandaigua lake. The total drainage area above the gaging station at Clyde is about 820 square miles.

CANANDAIGUA OUTLET AT ALLOWAY, WAYNE COUNTY, N. Y.

A temporary gage was erected by F. P. Williams, Resident Engineer, at the highway bridge across the Canandaigua outlet at Alloway, September 18, 1906. The gage consists of a board divided to feet and tenths, secured vertically to the northwest wing-wall of the bridge. The zero mark is at elevation 403.45. Measurements by means of surface-floats were made at a point about 500 feet below the bridge. Current-meter measurements are made on the down-stream side of the Alloway bridge. Owing to regulation by storage in Canandaigua lake, the flow in the outlet ordinarily fluctuates but little during the day. There are, however, a number of dams in the outlet, by which the flow may be temporarily held back as pondage.

Mean Daily Elevation of Water-surface of Canandaigua Outlet at Alloway, near Lyons, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1										408.76		
2										408.86		
3										408.86		
4										408.8		
5										408.8		
6										408.78		
7										409.52		
8										409.		
9										408.86		
10										408.94		
11										409.04		
12										409.1		
13										409.1		
14										408.82		
15										408.76		
16										408.82		
17										408.9		
18									408.52	408.78		
19									408.56	408.9		
20									408.66	409.9		
21									408.78	409.56		
22									408.78	409.32		
23									408.96	409.16		
24									408.90	409.16		
25									408.8	409.22		
26									408.82	409.2		
27									408.62	409.2		
28									408.62	409.26		
29									408.8	409.26		
30									409.08	409.16		
31												

Discharge Measurements of Canandaigua Outlet at Alloway, N. Y.

DATE.	Hydrographer.	Area.	Mean velocity.	Discharge.	Method.
		Square feet.	*Feet per second.*	*Second-feet.*	
1906.					
Sept. 17	F. P. Williams	140.3	0.98	137.5	Floats
Oct. 13	F. P. Williams			298.0	Floats
Nov. 9	E. F. Weeks	244.4	0.96	236.1	Current-meter

SENECA LAKE AT GENEVA, N. Y.

A gaging station was established at the foot of Seneca lake, October 18, 1905. The record is furnished by the Department of Public Works, Geneva, N. Y., Charles T. Church, superintendent. Readings are taken Wednesday night of each week by the engineer, Reynolds Hill, after the pumps are stopped.

The station is at the pump-house of the city water supply, about two miles south of Geneva, along the west shore of the lake. Two five-foot sections of galvanized iron gage, divided into feet and tenths, are fastened to a center post in the intake well; elevation of zero referred to U. S. Geological Survey tablet at Geneva, 440.78.

Drainage Areas Tributary to Seneca Lake.

LOCALITY.	AREA IN SQUARE MILES.		
	Place to place.	Sub-total.	Total.
Keuka lake.			
Land drainage to outlet	161		
Water-surface	17.5	178.5	
Keuka outlet to Seneca lake	24.80	203.3	
Catharine creek.			
Above Montour Falls	66.5		
Montour Falls to Seneca lake	29.9	96.4	
Watkins Glen creek	23.5	23.5	
Seneca lake.			
Direct lake drainage	317.8	317.8	641.0
Water-surface	67.2		708.2

Weekly Gage Height, in Feet, of Seneca Lake at Geneva (Pump-house), N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1												
2												
3												
4												
5												
6												4.5
7												
8											4.6	
9												
10												
11												
12												
13												4.4
14												
15											5.0	
16												
17												
18												
19												
20												
21												4.5
22											4.3	
23												
24												
25										5.0		
26												
27												
28												
29											4.3	
30												4.7
31										4.8		

Weekly Gage Height, in Feet, of Seneca Lake at Geneva (Pump-house), N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1								5.3				
2					5.1							
3	4.7									4.8		
4				4.7			5.4					
5									5.4			4.3
6						5.2						
7		4.5	4.4								4.4	
8								*a*				
9					5.1							
10	4.8									4.8		
11				4.9			5.5					
12									5.2			4.4
13						5.2						
14		4.4	4.4								4.4	
15								*a*				
16					5.1							
17	4.6									4.7		
18				5.1			5.4					
19									5.0			4.5
20						5.3						
21		4.4	3.9								4.6	
22								*a*				
23					5.1							
24	4.7									4.8		
25				5.3								
26							5.4		4.9			4.5
27						5.3						
28		4.3	4.3								4.5	
29								5.5				
30					5.2					4.5		
31	4.7											

a Water above gage; no reading obtained.

CAYUGA LAKE AT ITHACA, N. Y.

A gaging station was established by E. C. Murphy at the head of Cayuga lake August 6, 1905. A staff gage is used, attached to the wall of the breakwater, about 150 feet from the light-house. Gage readings are taken once each day during the open season, and once a week during the winter by Fred Thomas.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Cayuga Lake at Lighthouse, near Ithaca, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1									384.4	384.2	383.7	383.0
2									384.4	384.2	383.7	382.9
3									384.5	384.2	383.5	383.1
4									384.6	384.2	383.5	383.0
5									384.5	384.3	383.5	383.2
6								384.3	384.6	384.3	383.5	383.1
7								384.4	384.5	384.1	383.5	383.1
8								384.3	384.6	384.1	383.5	383.2
9								384.3	384.5	384.1	383.5	383.1
10								384.3	384.4	384.0	383.4	383.2
11								384.4	384.4	384.1	383.4	383.1
12								384.4	384.6	384.2	383.4	383.1
13								384.4	384.6	384.3	383.4	383.2
14								384.4	384.5	384.3	383.4	383.2
15								384.5	384.4	384.2	833.2	383.2

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Cayuga Lake at Lighthouse, near Ithaca, N. Y.—Concluded.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
16	......	......	......	......	......	......	......	384.6	384.4	384.2	383.2	383.1
17	......	......	......	......	......	......	......	384.5	384.4	384.1	383.2	......
18	......	......	......	......	......	......	......	384.5	384.4	384.0	383 2	......
19	......	......	......	......	......	......	......	384.3	384.5	384.2	383.3	......
20	......	......	......	......	......	......	......	384.3	384.5	384.1	383.2	......
21	......	......	......	......	......	......	......	384.4	384.5	384.2	383.1	......
22	......	......	......	......	......	......	......	384.4	384.4	384.1	383.0	......
23	......	......	......	......	......	......	......	384.4	384.5	384.0	383.0	383.3
24	......	......	......	......	......	......	......	384.4	384.4	384.0	382.9	......
25	......	......	......	......	......	......	......	384.5	384.4	384.0	382.9	......
26	......	......	......	......	......	......	......	384.5	384.4	383.9	382.9	......
27	......	......	......	......	......	......	......	384.5	384.2	383 7	383.0	......
28	......	......	......	......	......	......	......	384.3	384.3	383.8	382.8	......
29	......	......	......	......	......	......	......	384.4	384.2	383.8	382.9	......
30	......	......	......	......	......	......	......	384.5	384.2	383.7	383.1	383.5
31	......	......	......	......	......	......	......	384.5	......	383.7	......	......

Weekly Gage Height, in Feet, of Cayuga Lake at Ithaca, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	......	......	......	......	1.65	......	2.1	......	2.15	1.85	......	1.25
2	......	......	......	......	......	1.4	......	......	......	......	......	......
3	......	.65	.5	......	......	......	......	......	......	......	1.3	......
4	......	......	......	......	......	......	......	2.15	......	......	......	......
5	......	......	......	......	1.7	......	......	......	......	......	......	......
6	1.35	......	......	......	......	......	......	......	......	1.7	......	......
7	......	......	......	1.85	......	......	2.1	......	......	......	......	......
8	......	......	......	......	......	......	......	......	2.0	......	......	1.3
9	......	......	......	......	......	1.35	......	......	......	......	......	......
10	......	.55	.7	......	......	......	......	......	......	......	1.25	......
11	......	......	......	......	......	......	......	2.35	......	......	......	......
12	......	......	......	......	1.5	......	......	......	......	......	......	......
13	1.25	......	......	......	......	......	......	......	......	1.4	......	......
14	......	......	......	2.3	......	......	2.2	......	......	......	......	......
15	......	......	......	......	......	......	......	......	1.95	......	......	1.4
16	......	......	......	......	......	1.5	......	......	......	......	......	......
17	......	.4	.65	......	......	......	......	......	......	......	.95	......
18	......	......	......	......	......	......	......	2.2	......	......	......	......
19	......	......	......	......	1.35	......	......	......	......	......	......	......
20	.85	......	......	......	......	......	......	......	......	1.65	......	......
21	......	......	......	2.15	......	......	2.3	......	......	......	......	......
22	......	......	......	......	......	......	......	......	1.9	......	......	1.55
23	......	......	......	......	......	1.75	......	......	......	......	......	......
24	......	.35	.35	......	......	......	......	......	......	......	1.35	......
25	......	......	......	......	......	......	......	2.1	......	......	......	......
26	......	......	......	......	1.1	......	......	......	......	......	......	......
27	1.1	......	......	......	......	......	......	......	......	1.7	......	......
28	......	......	......	1.65	......	......	2.1	......	......	......	......	......
29	......	......	......	......	......	......	......	......	1.85	......	......	1.35
30	......	......	......	......	......	1.9	......	......	......	......	1.2	......
31	......	......	1.6	......	......	......	......	......	......	1.75	......	......

MAXIMUM DISCHARGE OF STREAMS IN THE FINGER LAKE REGION.

The accompanying table shows the highest discharge of which there is any reliable record on Clyde river, Canandaigua outlet, and Ganargua creek. The navigation season is assumed to cover

s. c feet econd, quare le.	Character of Data, etc.
.....	
.....	
5.4	Combination of maximum for each tributary.
6.4	
11.6	Poor.
8.8	Good.
17.4	Excellent.
17.6	Data poor, flow probably did not exceed figures given.
20	Very poor; assumes: velocity, 3 feet per second, area, 114 square feet; velocity, 4 feet per second, area, 184 square feet.
.....	It is quite certain floods have not exceeded amounts given.
5.35	Excellent.
5.31	Excellent. Has seen about same navigation season discharge twice before in June in past 18 years.
5.76	Within two inches of high-water mark for two days, July 4–5, 1906.
3.25	Fair.
4.56	Excellent; level crest, 1 on 3 slope, $c = 3.58$.
5.0	
4.8	Poor; submergence and side overflow in floods.

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the period from May 1 to November 30. Owing to the regulation of these streams by lake storage, it is impossible to form any estimate of the maximum discharge which they will yield by the ordinary methods. It will be noted that much of the data for the navigation season freshets is relative to the high water of July, 1906. The field work on which this table is based was carried out just after the subsidence of this flood and is considered more reliable than for the other floods recorded, although it appears likely that the streams have been equally high, or nearly so, during the summer season of other years.

The flood of July, 1906, was the result of heavy thunder storms in the region of the head waters of the streams. Unfortunately no adequate rainfall was obtained within the area of maximum precipitation. The computations refer to the extreme maximum stage, which was usually of only a few hours duration. The results are based on somewhat rough surveys of dams, together with data as to the discharge through turbines, waste-weirs, etc.

The table is shown on page 124–A.

ONEIDA RIVER AT SCHROEPPEL'S BRIDGE, NEAR EUCLID, N. Y.

Oneida lake has a water-surface area of 80 square miles and lies at an elevation of 370 feet above tide. The drainage basin within a radius of 10 miles to the south and west is relatively flat, with numerous swampy tracts. The lake receives, through Chittenango and Oneida creeks, drainage from an extensive area of the central New York plateau and, through Wood and Fish creeks on the east, drainage from a portion of the west slope of the plateau bordering the Adirondack mountains. On the north the drainage area is less extensive and the inflowing streams are small.[a]

The outflow from the lake through Oneida river joins Seneca river at Three River Point, forming Oswego river. From Brewerton to Three River Point the distance, in a straight line, is but eight miles; following the windings of the stream it is sixteen miles.

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[a] A portion of the drainage area is shown on the Syracuse, Chittenango, Oneida, Oriskany, Morrisville, Cazenovia and Tully topographic atlas sheets of the United States Geological Survey.

The gaging station was established August 30, 1902, and is maintained by the U. S. Geological Survey in co-operation with this Department. It is located seven miles up-stream from Three River Point.

Observations of stream stage, which are taken each morning and evening by Arthur McArthur, are made by measuring down to the water-surface from a reference point on the bulkhead coping of the lock at Oak Orchard State dam, 0.4 mile above Schroeppel's bridge. The gage readings have been taken above the dam to avoid backwater from ice or other causes as far as possible. A calibration curve for the cross-section of the stream at Schroeppel's bridge has been obtained by current-meter measurements.

Above a certain stage the dam becomes submerged and the discharge is modified. A special rating table, deduced from measurements made during the period of submergence, is used to calculate the discharge during the high-water period. Allowance is made for the opening of lock-paddles in winter.

Gages for Determining Elevation of Water-surface on Oneida River.

LOCATION.	DISTANCE IN MILES.*		Usual time of reading gage.	Present type of gage.
	Place to place.	From Three River Point.		
Three River Point	0	0	7 a. m.	Board with coppered staples
Below Oak Orchard dam	5.3	5.3	6 a. m.; 7 p. m.	Board with coppered staples
Above Oak Orchard dam	0	5.3	6 a. m.; 7 p. m.	Board with coppered staples
Below Caughdenoy lock	7.4	12.7	8 a. m.	Board with coppered staples
Above Caughdenoy lock	0	12.7	8 a. m.	Board with coppered staples
Brewerton	4.0	16.7	8 a. m.	Board with coppered staples
Sylvan Beach	21.6	38.3	8 a. m.	Graduated board

*Measured along course of stream on U. S. Geological Survey topographic map.

Mean Daily Gage Height, in Feet, of Oneida River at Schroeppel's Bridge, Euclid P. O., N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	3.25	2.55	3.48	2.70	2.95	3.9	4.1	4.45	5.15	5.18	4.9	4.28
2	3.1	2.55	3.58	2.55	3.0	3.9	4.1	4.62	5.25	5.25	4.88	4.28
3	3.1	2.6	3.42	2.55	3.08	3.92	4.1	4.65	5.30	5.28	4.8	4.35
4	3.05	2.7	3.4	2.5	2.98	3.95	4.0	4.85	5.3	5.22	4.9	4.28
5	3.0	2.8	3.32	2.5	2.95	3.98	3.92	5.1	5.3	5.2	4.9	4.08
6	3.02	2.98	3.25	2.4	2.92	4.08	4.0	5.1	5.3	5.1	4.9	4.0
7	3.12	3.02	3.25	2.45	3.0	3.98	4.02	5.1	5.3	5.18	4.9	4.0
8	3.2	3.12	3.32	2.45	3.08	3.88	4.02	5.0	5.3	5.05	4.9	3.9
9	3.1	3.3	3.38	2.0	3.15	3.78	4.12	5.0	5.3	4.92	4.9	3.88
10	3.0	3.3	3.4	1.85	3.25	3.75	4.15	5.0	5.2	5.1	4.9	3.78
11	3.1	3.4	3.4	2.1	3.25	3.75	4.2	5.1	5.3	5.0	4.88	3.7
12	3.1	3.42	3.5	2.1	3.25	3.82	4.2	5.18	5.4	5.0	4.8	3.7
13	3.2	3.5	3.5	2.02	3.3	3.75	4.3	5.0	5.3	5.0	4.82	3.8
14	3.3	3.6	3.5	1.95	3.28	3.75	4.3	4.7	5.4	5.02	4.9	3.85
15	3.3	3.7	3.58	1.95	3.2	3.75	4.3	4.75	5.4	5.1	4.98	3.85

Mean Daily Gage Height, in Feet, of Oneida River at Schroeppel's Bridge, Euclid P. O., N. Y.—Concluded.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
16	3.3	3.7	3.7	1.95	3.3	3.8	4.32	4.82	5.4	5.08	4.88	3.82
17	3.32	3.75	3.7	1.85	3.3	3.65	4.4	4.9	5.4	4.98	4.8	3.8
18	3.3	3.8	3.7	1.9	3.4	3.65	4.4	4.9	5.42	4.9	4.72	3.8
19	3.35	3.9	3.75	1.9	3.42	3.68	4.42	4.85	5.48	4.88	4.7	3.8
20	3.32	3.9	3.8	2.0	3.48	3.78	4.50	4.7	5.38	4.85	4.68	3.72
21	3.18	3.88	3.85	2.1	3.55	3.88	4.50	4.72	5.3	5.0	4.50	3.7
22	3.0	3.9	3.85	2.1	3.58	3.98	4.50	4.8	5.3	5.02	4.45	3.7
23	2.78	3.75	3.90	2.15	3.65	4.0	4.5	4.9	5.28	5.05	4.7	3.7
24	2.72	3.7	4.0	2.22	3.75	4.02	4.55	4.92	5.20	5.05	4.7	3.6
25	2.58	3.62	4.0	2.3	3.78	4.1	4.6	5.0	5.2	5.05	4.55	3.65
26	2.50	3.55	3.98	2.42	3.85	4.1	4.62	5.0	5.2	5.05	4.4	3.82
27	2.5	3.68	3.75	2.52	3.82	4.1	4.7	5.05	5.2	5.05	4.4	3.92
28	2.55	3.58	3.32	2.6	3.72	4.1	4.7	5.1	5.2	4.98	4.38	4.0
29	2.55	......	3.15	2.68	3.68	4.1	4.6	5.05	5.2	4.9	4.3	4.1
30	2.60	......	2.9	2.8	3.78	4.1	4.35	5.1	5.12	4.9	4.3	3.88
31	2.7	......	2.75	......	3.85	.....	4.2	5.15	......	4.9	......	3.8

Current Meter Discharge Measurements on Oneida River at Schroeppel's Bridge, Euclid P. O., N. Y.

No.	DATE.	Hydrographer.	Meter number.	Width.	Area of section.	Mean velocity.	Gage height.	Discharge.
	1906.			*Feet.*	*Square feet.*	*Feet per second.*	*Feet.*	*Second-feet.*
26	May 17	C. C. Covert....	349	245	1,400	2.49	3.30	3,490
27	Aug. 10	C. C. Covert....	357	240	1,010	1.27	4.71	1,280
28	Sept. 21	E. F. Weeks....	344	238	867	0.81	5.30	705
29	Oct. 18	E. F. Weeks....	360	234	860	1.05	a4.90	906

a Correction for 1-ft. flash boards = 0.60.

Mean Daily Discharge, Second-feet, of Oneida River at Schroeppel's Bridge, Euclid P. O., N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	3,720	5,240	3,270	4,900	4,180	2,380	2,070	1,570	866	845	1,090	1,980
2	4,030	5,240	3,100	5,240	4,070	2,380	2,070	1,380	783	783	1,120	1,980
3	4,030	5,130	3,370	5,240	3,920	2,340	2,070	1,350	742	762	1,190	1,870
4	4,130	4,900	3,420	5,350	4,130	2,290	2,210	1,140	742	804	1,090	1,970
5	4,230	4,680	3,570	5,350	4,180	2,250	2,340	907	742	824	1,090	2,260
6	4,180	4,280	3,720	5,600	4,240	2,110	2,210	907	742	907	1,090	2,370
7	3,980	4,180	3,720	5,470	4,070	2,250	2,180	907	742	845	1,090	2,370
8	3,830	3,980	3,570	5,470	3,920	2,420	2,180	990	742	949	1,090	2,540
9	4,030	3,620	3,470	6,580	3,770	2,590	2,040	990	942	1,070	1,090	2,580
10	4,230	3,620	3,420	6,970	3,560	2,630	2,000	990	824	907	1,090	2,750
11	4,030	3,420	3,420	6,330	3,560	2,630	1,920	907	742	990	1,120	2,880
12	4,030	3,370	3,220	6,330	3,560	2,510	1,920	845	658	990	1,190	2,880
13	3,830	3,220	2,220	6,520	3,460	2,630	1,780	990	742	990	1,170	2,710
14	3,620	3,050	3,220	6,710	3,510	2,630	1,780	1,300	658	969	1,090	2,630
15	3,620	2,880	3,100	6,710	3,670	2,630	1,780	1,240	658	907	1,020	2,630
16	3,620	2,880	2,880	6,710	3,460	2,550	1,740	1,170	658	928	1,120	2,670
17	3,570	2,790	2,880	6,970	3,460	2,800	1,640	1,090	658	1,020	1,190	2,710
18	3,620	2,710	2,880	6,840	3,260	2,800	1,640	1,090	637	1,090	1,270	2,710
19	3,520	2,540	2,790	6,840	3,210	2,760	1,600	1,140	495	1,120	1,300	2,710
20	3,570	2,540	2,710	6,580	3,110	2,590	1,500	1,300	679	1,140	1,330	2,830
21	3,880	2,580	2,630	6,330	2,980	2,420	1,500	1,270	742	990	1,500	2,880
22	4,230	2,540	2,630	6,330	2,940	2,250	1,500	1,190	742	969	1,570	2,880
23	4,740	2,790	2,540	6,210	2,800	2,210	1,500	1,090	762	949	1,300	2,880
24	4,840	2,880	2,370	6,025	2,630	2,180	1,450	1,070	824	949	1,300	3,050
25	5,180	3,000	2,370	5,840	2,590	2,070	1,400	990	824	949	1,450	2,960
26	5,350	3,140	2,410	5,545	2,470	2,070	1,380	990	824	949	1,640	2,670
27	5,350	2,920	2,790	5,295	2,510	2,070	1,300	949	824	949	1,640	2,500
28	5,240	3,100	3,570	5,130	2,680	2,070	1,300	907	824	1,020	1,680	2,370
39	5,240	......	3,930	4,955	2,760	2,070	1,400	949	824	1,090	1,780	2,230
30	5,130	......	4,450	4,680	2,590	2,070	1,710	907	886	1,090	1,780	2,580
31	4,900	......	4,790	......	2,470	......	1,920	866	......	1,090	......	2,710

Monthly Discharge of Oneida River at Schroeppel's Bridge, Euclid P. O., N. Y.
[Drainage area, 1,400 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1906.					
January	5,350	3,570	4,250	3.24	3.74
February	5,240	2,540	3,480	2.65	2.76
March	4,790	2,370	3,210	2.44	2.81
April	6,970	4,680	5,970	4.54	5.04
May	4,240	2,470	3,340	2.54	2.93
June	2,800	2,070	2,390	1.82	2.03
July	2,340	1,300	1,790	1.36	1.57
August	1,570	866	1,080	.822	.942
September	886	495	744	.566	0.627
October	1,140	762	962	.732	.842
November	1,780	1,020	1,280	.975	1.09
December	3,050	1,870	2,560	1.95	2.25
The year	3,350	2,000	2,590	1.97	2.22

Paddles open from January 1 to April 30 approximately, and November 30 to December 31, all dates inclusive. Gage height corrected for flash-boards on dam July 28 to October 22, inclusive. During January, February and part of March river partly frozen over above dam, but not sufficiently to modify flow.

ELEVATION OF WATER-SURFACE IN ONEIDA RIVER BASIN.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oneida River at Three River Point, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	......	363.6	361.6	362.0	361.6	361.7	362.2	*
2	......	......	......	......	365.2	363.5	361.5	361.9	361.6	361.8	362.2	......
3	......	......	......	......	365.2	363.4	361.5	361.9	361.6	362.0	362.2	......
4	......	......	......	......	365.2	363.1	361.6	361.8	361.8	362.0	362.2	......
5	......	......	......	......	365.1	363.1	361.6	361.9	361.7	361.8	362.3	......
6	......	......	......	......	365.1	363.0	361.5	361.9	361.7	361.7	362.3	......
7	......	......	......	......	365.1	362.8	361.4	362.0	361.6	361.7	362.3	......
8	......	......	......	......	365.0	362.7	361.4	361.9	361.6	361.7	362.2	......
9	......	......	......	......	364.9	362.7	361.3	361.7	361.6	361.8	362.2	......
10	......	......	......	......	364.8	362.8	361.5	361.7	361.6	361.9	362.2	......
11	......	......	......	......	364.7	362.7	361.4	361.6	361.7	361.9	362.2	......
12	......	......	......	......	364.6	362.7	361.3	361.6	361.7	361.9	362.2	......
13	......	......	......	......	364.5	362.6	361.3	361.7	361.6	361.9	362.2	......
14	......	......	......	......	364.3	362.6	361.2	361.8	361.5	361.9	362.2	......
15	......	......	......	......	364.2	362.5	361.2	361.8	361.6	361.9	362.1	......
16	......	......	......	366.2	364.1	362.4	361.3	361.6	361.5	362.1	362.1	......
17	......	......	......	......	364.0	362.3	361.3	361.6	361.5	362.0	362.0	......
18	......	......	......	366.0	363.9	362.3	361.3	361.6	361.7	361.9	361.9	......
19	......	......	......	366.1	363.9	362.3	361.2	361.6	361.6	361.8	361.8	......
20	......	......	......	366.0	363.8	362.2	361.1	361.7	361.5	361.9	361.9	......
21	......	......	......	365.9	363.8	362.2	360.9	361.8	361.5	361.9	361.8	......
22	......	......	......	365.9	363.9	362.1	360.9	361.8	361.4	362.2	361.8	......
23	......	......	......	365.8	363.8	362.1	360.9	361.7	361.6	362.4	361.7	......
24	......	......	......	365.8	363.7	362.0	361.2	361.7	361.4	362.4	361.7	......
25	......	......	......	365.7	363.7	361.9	361.1	361.7	361.7	362.3	361.7	......
26	......	......	......	365.6	363.7	362.0	361.7	361.6	361.4	362.3	361.7	......
27	......	......	......	365.5	363.6	361.9	361.7	361.7	361.4	362.3	361.8	......
28	......	......	......	365.4	363.6	361.7	361.7	361.8	361.6	362.2	361.9	......
29	......	......	......	365.2	363.7	361.7	361.7	361.7	361.7	362.2	361.8	......
30	......	......	......	365.2	363.6	361.6	361.7	361.7	361.7	362.3	361.7	......
31	......	......	......	......	363.7	......	362.0	361.7	......	362.4	......	......

*Discontinued for winter.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oneida River at Three River Point, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	366.6	363.8	361.5	363.2	361.7	362.6	362.3	362.6	362.4
2	......	......	......	366.6	363.6	361.4	363.2	361.6	362.6	362.3	362.6	362.5
3	......	......	......	366.5	363.5	361.3	363.1	361.6	362.8	362.2	362.6	363.1
4	......	......	......	366.5	363.4	361.3	363.2	361.4	362.9	362.1	362.5	363.2
5	......	......	......	366.5	363.4	361.3	362.9	361.3	362.8	362.1	362.7	363.2
6	......	......	......	366.5	363.3	361.2	362.8	361.4	362.8	362.1	362.8	363.2
7	......	......	......	366.4	363.3	361.3	362.7	361.4	362.8	362.0	362.7	363.2
8	......	......	......	366.4	363.3	361.4	362.7	362.1	362.8	362.1	362.8	363.3
9	......	......	......	366.3	363.1	361.3	362.7	362.3	362.7	362.1	362.8	363.3
10	......	......	......	366.2	363.0	361.3	362.6	362.2	362.7	362.0	362.8	363.3
11	......	......	......	366.0	362.8	361.6	362.4	362.1	362.7	362.1	362.7	363.2
12	......	......	......	366.0	362.7	361.5	362.3	362.2	362.7	362.4	362.9	363.2
13	......	......	......	365.9	362.6	361.6	362.3	362.4	362.6	362.5	362.9	363.3
14	......	......	......	365.7	362.7	361.6	362.3	362.4	362.6	362.7	362.8	363.4
15	......	......	......	365.6	362.7	361.5	362.3	362.4	362.5	362.9	362.7	363.3
16	......	......	......	365.5	362.6	361.4	362.3	362.5	362.4	362.8	362.7	363.2
17	......	......	......	365.4	362.5	361.4	362.2	362.7	362.6	362.7	362.6	363.1
18	......	......	......	365.2	362.4	362.2	362.1	362.7	362.5	362.7	362.7	363.0
19	......	......	......	365.0	362.3	362.5	362.0	362.7	362.4	362.6	362.8	362.8
20	......	......	......	364.9	362.2	362.6	361.9	362.8	362.5	362.6	362.7	362.7
21	......	......	......	364.8	362.3	362.7	361.9	362.7	362.5	362.5	362.7	362.8
22	......	......	362.7	364.8	362.2	363.1	361.8	362.6	362.4	362.8	362.5	363.2
23	......	......	362.8	364.7	362.1	363.2	361.7	362.5	362.4	362.9	362.4	363.4
24	......	......	363.3	364.6	362.0	363.2	361.6	362.4	362.4	362.8	362.4	363.2
25	......	......	364.0	364.5	361.9	363.3	361.5	362.3	362.5	362.8	362.5	363.1
26	......	......	365.1	364.4	361.8	363.5	361.4	362.2	362.4	362.7	362.6	362.9
27	......	......	365.9	364.2	361.7	363.5	361.3	362.3	362.3	362.7	362.5	362.9
28	......	......	366.3	364.1	361.8	363.4	361.2	362.2	362.2	362.6	362.5	362.8
29	......	......	366.4	364.0	361.7	363.3	361.1	362.1	362.2	362.7	362.5	363.6
30	......	......	366.5	363.9	361.6	363.3	361.8	362.5	362.1	362.7	362.4	363.8
31	......	......	366.6	......	361.6	......	361.8	362.6	......	362.6	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oneida River at Three River Point, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	363.5	362.9	362.7	364.5	363.1	362.5	362.5	361.7	361.5	361.6	362.3	362.7
2	363.4	362.8	362.5	364.6	363.1	362.4	362.6	361.7	361.7	361.4	362.2	362.8
3	363.3	362.7	362.4	364.4	363.2	362.4	362.5	361.8	361.5	361.3	362.2	362.9
4	363.3	363.0	363.1	364.3	363.3	362.4	362.6	361.8	361.4	361.3	362.3	362.8
5	363.3	362.9	363.3	364.3	363.4	362.2	362.6	362.2	361.3	361.4	362.3	362.6
6	363.4	362.8	363.2	364.4	363.5	362.1	362.5	362.3	361.2	361.4	362.1	362.4
7	363.2	362.7	363.2	364.5	363.6	362.1	362.4	362.1	361.2	361.6	362.1	362.4
8	363.2	362.6	363.1	364.5	363.4	362.2	362.6	362.1	361.2	361.9	362.0	362.8
9	363.2	362.6	363.1	364.4	363.4	362.2	362.6	362.1	361.6	361.6	361.9	362.9
10	363.4	362.5	363.1	364.9	363.2	362.5	362.4	362.1	361.6	361.6	361.9	362.9
11	363.4	362.6	363.0	365.0	363.1	362.6	362.4	362.0	361.4	361.7	362.1	362.9
12	363.3	362.5	362.9	365.0	363.2	362.5	362.4	362.1	361.3	361.8	362.3	362.9
13	363.2	362.4	362.9	364.9	363.3	362.4	362.4	362.1	361.5	361.7	362.2	362.8
14	363.0	362.3	362.8	364.8	363.3	362.4	362.4	362.0	361.4	361.9	362.3	362.8
15	363.0	362.3	362.8	365.0	363.2	362.3	362.4	361.9	361.4	361.8	362.3	362.9
16	363.0	362.4	362.7	365.0	363.1	362.2	362.3	361.8	361.5	361.8	362.4	363.3
17	363.1	362.4	362.6	364.9	363.1	362.9	362.1	361.8	361.5	361.7	362.4	363.3
18	363.1	362.5	362.7	364.9	363.0	362.9	362.0	361.7	361.4	361.5	362.7	363.5
19	363.0	362.4	362.6	364.8	362.9	363.2	361.9	361.8	361.4	361.6	362.7	363.5
20	362.9	362.2	362.5	364.8	362.9	363.1	361.8	361.8	361.5	361.9	362.8	363.6
21	363.3	362.1	362.4	364.7	362.8	363.0	361.8	361.8	361.6	362.1	362.7	363.6
22	363.5	362.4	362.3	364.7	362.7	362.9	362.0	361.8	361.6	362.3	362.8	363.6
23	363.7	362.0	362.1	364.6	362.6	362.9	361.9	361.7	361.8	362.1	362.9	363.4
24	363.8	362.7	362.1	364.2	362.6	363.0	361.7	361.7	361.8	362.2	363.0	363.4
25	363.8	362.8	362.3	364.1	362.5	363.0	361.6	361.7	361.6	362.2	363.1	363.3
26	363.7	363.0	362.2	363.9	362.4	362.7	361.5	362.0	361.6	362.2	363.1	363.0
27	363.5	362.8	362.6	363.5	362.6	362.6	361.5	361.9	361.5	362.1	362.9	362.9
28	363.3	362.7	363.4	363.3	362.6	362.5	361.4	361.6	361.4	362.3	362.8	362.8
29	363.2	......	363.9	363.4	362.5	362.5	361.3	361.5	361.3	362.4	362.8	362.8
30	363.1	......	364.1	363.3	362.6	362.4	361.5	361.6	361.5	362.4	362.8	363.0
31	363.0	......	364.4	......	362.6	......	361.7	361.5	......	362.4	......	363.1

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oneida River below Oak Orchard Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	367.7	364.6	362.1	362.2	362.0	362.0	362.7	361.8
2	......	......	......	......	367.6	364.4	362.1	362.2	361.9	......	362.6	361.9
3	......	......	......	......	367.6	364.2	......	362.2	361.9	362.2	362.6	361.8
4	......	......	......	......	367.4	364.0	362.1	362.2	......	362.2	362.6	......
5	......	......	......	......	367.3	......	362.0	362.2	362.0	362.1	362.6	362.0
6	......	......	......	......	367.2	363.8	362.0	362.3	361.9	362.1	......	362.9
7	......	......	......	......	367.1	363.7	362.0	......	361.9	362.0	362.6	362.0
8	......	......	......	......	......	363.6	361.9	362.1	361.8	362.0	362.6	362.1
9	......	......	......	......	366.8	363.6	361.9	362.0	361.9	......	362.5	362.2
10	......	......	......	......	366.6	363.8	......	361.9	361.9	362.2	362.4	362.1
11	......	......	......	......	366.4	363.5	361.9	361.8	......	362.1	362.3	......
12	......	......	......	......	366.2	......	361.8	361.8	361.9	362.2	362.3	362.1
13	......	......	......	......	366.0	363.5	361.8	361.8	361.8	362.4	......	362.1
14	......	......	......	......	365.8	363.3	361.7	......	361.7	362.2	362.2	362.1
15	......	......	......	......	......	363.2	361.7	361.9	361.8	362.3	362.2	362.0
16	......	......	......	......	365.6	363.1	361.8	361.8	361.8	......	362.0	362.0
17	......	......	......	......	365.5	363.1	......	361.8	361.8	362.3	362.0	362.0
18	......	......	......	......	365.5	363.0	361.9	361.7	......	362.3	362.2	......
19	......	......	......	......	365.5	......	361.7	361.8	361.9	362.3	362.2	362.0
20	......	......	......	......	365.3	362.9	361.6	361.9	361.8	362.4	......	362.0
21	......	......	......	......	365.2	362.8	361.5	......	361.8	362.4	362.0	361.9
22	......	......	......	......	......	362.7	361.5	362.2	361.7	362.6	362.0	362.0
23	......	......	......	367.9	365.1	362.7	361.6	362.2	361.8	......	362.0	362.0
24	......	......	......	367.8	365.0	362.7	......	362.2	361.8	362.8	362.0	362.1
25	......	......	......	367.7	364.9	362.6	361.5	362.1	......	362.8	362.0	......
26	......	......	......	367.6	364.9	......	362.1	362.1	361.9	362.7	361.9	362.2
27	......	......	......	367.6	364.7	362.4	362.1	362.0	361.9	362.8	......	362.3
28	......	......	......	367.6	364.7	362.3	362.1	......	361.9	362.8	362.0	363.0
29	......	......	......	367.7	......	362.3	362.1	362.0	361.9	362.8	362.0	363.2
30	......	......	......	367.7	364.6	362.2	362.1	362.0	362.0	......	362.0	363.3
31	......	......	......	......	364.5	......	362.1	361.9	......	362.8	......	363.4

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oneida River below Oak Orchard Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	364.2	362.7	368.6	365.6	362.4	364.0	362.5	363.1	362.7	363.4	362.9
2	363.7	364.1	362.7	......	365.5	362.4	......	362.5	363.3	362.6	363.5	363.6
3	363.7	364.0	362.6	368.7	365.4	362.2	364.0	362.4	......	362.6	363.6	364.1
4	363.9	363.7	362.5	368.8	365.2	......	364.0	362.4	363.6	362.7	363.3	364.3
5	364.5	......	......	368.8	365.2	362.2	363.9	362.3	363.7	362.6	363.3	364.3
6	364.5	363.6	362.4	368.8	365.1	362.2	363.8	362.5	363 7	362.5	363.4	364.5
7	364.9	363.6	362.4	368.9	......	362.4	363.7	362.4	363.8	362.6	363.5	364.5
8	......	363.5	362.3	368.9	364.9	362.4	363.6	362.3	363.8	362.6	363.7	364.5
9	364.8	363.5	362.2	......	364.7	362.4	......	362.3	363.8	362.6	363.7	364.5
10	364.6	363.4	362.2	368.7	364.7	362.3	363.5	362.2	363.9	362.8	363.7	364.6
11	364.4	363.4	362.1	368.5	364.6	......	363.4	362.2	363.9	363.1	363.8	364.7
12	364.3	......	......	368.5	364.5	362.3	363.3	362.1	364.0	363.3	363.9	364.8
13	364.1	363.4	362.0	368.4	364.4	362.3	363.1	......	363.9	363.4	363.7	364.7
14	364.0	363.5	362.0	368.3	......	362.3	363.1	362.5	363.8	363.6	363.7	364.6
15	......	363.5	362.0	368.1	364.2	362.2	363.0	362.6	363.8	363.3	363.8	364.4
16	364.0	363.6	362.0	......	364.0	362.3	......	363.0	363.8	363.4	363.6	364.3
17	363.9	363.5	361.9	367.7	363.9	362.3	363.0	363.1	363.6	363.4	363.4	364.1
18	363.8	363.6	361.9	367.5	363.8	......	362.9	363.3	363.5	363.5	363.6	363.5
19	363.7	......	......	367.3	363.6	363.5	362.9	363.3	363.3	363.6	363.6	363.3
20	363.6	363.6	362.3	367.1	363.5	363.6	362.7	......	363.4	363.5	363.7	363.8
21	363.6	363.5	362.5	367.0	......	363.6	362.7	363.0	363.3	363.4	363.3	364.1
22	......	363.5	362.7	366.9	363.3	363.9	362.6	362.9	363.2	363.7	363.2	364.3
23	363.8	363.3	363.1	......	363.1	364.0	......	362.8	363.1	363.7	363.1	364.5
24	363.9	363.2	363.7	366.8	363.0	364.0	362.3	362.7	363.1	363.7	363.1	364.7
25	364.1	363.1	364.8	366.5	362.9	364.4	362.3	362.7	363.1	363.6	363.2	364.6
26	364.5	......	......	366.4	362.9	364.4	362.3	362.6	363.0	363.6	363.3	364.5
27	365.0	362.9	367.2	366.3	362.8	364.4	362.2	......	362.9	363.6	363.0	364.4
28	364.8	362.8	367.8	366.1	......	364.3	362.2	362.3	362.8	363.4	363.0	364.7
29	......	......	368.1	366.0	362.7	364.1	362.5	362.5	362.8	363.4	363.0	364.9
30	364.6	......	368.4	......	362.6	364.1	362.3	362.4	362.7	363.4	362.9	364.8
31	364.4	......	368.5	......	362.5	......	362.5	362.7	......	364.4	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oneida River below Oak Orchard Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	364.9	365.0	364.1	365.6	365.3	363.1	362.9	362.1	361.9	361.7	362.4	363.2
2	364.7	364.8	363.8	365.7	365.2	363.0	363.0	362.2	361.9	361.8	362.4	363.2
3	364.6	364.8	363.6	365.6	365.1	363.0	363.0	362.1	361.8	361.8	362.4	363.2
4	364.8	364.6	364.1	365.7	365.3	363.0	363.1	362.1	361.8	361.7	362.4	363.3
5	364.9	364.4	364.3	365.7	365.4	362.9	363.2	362.4	361.7	361.8	362.4	363.4
6	365.0	364.3	364.2	365.8	365.2	362.8	363.1	362.4	361.7	361.9	362.2	363.5
7	365.3	364.1	364.3	365.8	365.0	363.0	363.1	362.5	361.6	361.8	362.1	363.8
8	365.2	364.1	364.2	365.9	364.8	363.2	363.1	362.5	361.6	362.0	362.1	364.1
9	365.1	364.0	364.1	366.1	364.5	363.3	363.1	362.5	361.7	361.7	362.0	364.6
10	365.1	363.8	364.1	366.5	364.3	363.4	363.1	362.4	361.8	361.7	362.2	364.5
11	365.0	363.7	364.0	366.5	364.3	363.5	363.2	362.4	361.7	361.8	362.3	364.4
12	365.0	363.6	364.0	366.4	364.2	363.4	363.2	362.1	361.6	361.9	362.4	364.2
13	364.9	363.4	363.8	366.3	364.2	363.3	363.2	362.1	361.6	361.9	362.4	364.1
14	364.5	363.5	363.6	366.2	364.2	363.3	363.1	361.9	361.5	362.0	362.4	363.9
15	364.5	363.5	363.6	366.3	364.2	363.3	363.1	362.1	361.6	361.9	362.4	364.0
16	364.3	363.5	363.4	366.4	364.1	363.3	363.0	362.2	361.6	361.8	362.5	364.1
17	364.1	363.3	363.3	366.5	364.0	363.7	362.9	362.1	361.6	361.8	362.6	364.1
18	364.1	363.1	363.1	366.5	363.9	363.8	362.9	362.1	361.5	361.7	362.8	364.1
19	364.1	363.0	363.0	366.4	363.8	363.9	362.7	362.1	361.6	361.9	362.8	364.0
20	364.1	362.9	363.0	366.3	363.8	363.7	362.6	362.4	361.7	362.0	362.8	364.0
21	364.4	362.9	362.9	366.2	363.7	363.6	362.6	362.3	361.8	362.2	362.9	364.0
22	364.7	363.1	362.7	366.1	363.6	363.5	362.5	362.3	361.8	362.4	363.0	364.0
23	365.0	363.3	362.6	366.0	363.5	363.4	362.3	362.2	362.0	362.2	363.1	363.9
24	365.4	363.7	362.4	365.6	363.4	363.5	362.2	362.2	362.0	362.3	363.1	363.7
25	365.5	363.7	362.6	365.5	363.4	363.4	362.2	362.2	361.8	362.3	363.3	363.6
26	365.5	363.9	362.9	365.4	363.3	363.3	362.2	362.2	361.7	362.3	363.3	363.4
27	365.5	363.9	363.6	365.3	363.3	363.2	362.1	362.2	361.7	362.3	363.2	363.5
28	365.4	364.1	364.4	365.2	363.4	363.1	362.0	362.2	361.5	362.5	363.2	363.6
29	365.2	......	364.9	365.0	363.5	363.0	361.8	362.1	361.5	362.5	363.1	363.4
30	365.2	......	365.2	364.9	363.4	362.9	361.9	362.1	361.6	362.5	363.1	363.3
31	365.1	......	365.5	......	363.3	......	362.1	362.1	......	362.5	......	364.0

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oneida River above Oak Orchard Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	368.3	366.1	364.8	365.1	365.1	364.2	365.0	364.5
2	......	......	......	......	368.2	366.0	364.7	365.0	365.0	......	365.0	364.4
3	......	......	......	......	368.2	365.8	......	365.0	365.0	364.3	365.0	364.4
4	......	......	......	......	368.1	365.7	364.7	365.0	......	364.3	364.9	......
5	......	......	......	......	367.9	......	364.7	364.9	365.0	364.4	365.0	364.6
6	......	......	......	......	367.8	365.6	364.7	364.9	365.0	364.4	......	364.5
7	......	......	......	......	367.7	365.6	364.7	......	364.9	364.5	364.9	364.5
8	......	......	......	......	......	365.5	364.7	365.0	364.9	364.6	364.9	364.4
9	......	......	......	......	367.6	365.5	364.7	365.0	364.9	......	364.9	364.4
10	......	......	......	......	367.4	365.6	......	365.0	364.9	364.7	364.8	364.5
11	......	......	......	......	367.3	365.5	364.6	364.9	......	364.6	364.7	......
12	......	......	......	......	367.2	......	364.6	364.9	364.9	364.8	364.7	364.4
13	......	......	......	......	367.1	365.5	364.5	364.9	364.9	364.9	......	364.4
14	......	......	......	......	367.0	365.4	364.4	......	364.9	364.7	364.5	364.4
15	......	......	......	......	......	365.3	364.5	364.9	364.9	364.7	364.7	364.5
16	......	......	......	......	366.7	365.2	364.6	364.8	364.8	......	364.6	364.5
17	......	......	......	......	366.8	365.2	......	364.8	364.8	364.7	364.6	364.5
18	......	......	......	......	366.7	365.2	364.6	364.9	......	364.7	364.7	......
19	......	......	......	......	366.7	......	364.6	364.9	364.8	364.7	364.7	364.4
20	......	......	......	......	366.6	365.2	364.5	365.0	364.8	364.9	......	364.4
21	......	......	......	......	366.5	365.1	364.5	......	364.9	364.7	364.5	364.3
22	......	......	......	......	......	365.0	364.5	365.0	364.9	364.9	364.6	364.3
23	......	......	......	368.5	366.4	365.0	364.6	365.1	364.8	......	364.6	364.3
24	......	......	......	368.4	366.3	365.0	......	365.0	364.8	364.9	364.6	364.3
25	......	......	......	368.3	366.3	365.0	364.5	365.0	......	365.0	364.6	......
26	......	......	......	368.2	366.2	......	364.5	365.0	364.3	365.0	364.5	364.4
27	......	......	......	368.2	366.0	364.8	365.1	365.1	364.3	365.0	......	366.4
28	......	......	......	368.3	366.1	364.9	365.1	......	364.3	365.0	364.5	364.7
29	......	......	......	368.4	......	364.9	365.1	365.1	364.3	365.0	364.6	364.9
30	......	......	......	368.3	366.0	364.8	365.1	365.1	364.3	......	364.6	364.9
31	......	......	......	......	366.0	......	......	365.0	......	365.0	......	365.0

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oneida River above Oak Orchard Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	365.4	364.4	369.2	366.8	365.2	365.8	365.2	365.1	365.0	365.5	364.8
2	365.2	365.2	364.4	......	366.8	365.2	......	365.1	365.2	365.0	365.7	365.5
3	365.2	365.0	364.4	369.0	366.8	365.2	365.6	365.0	......	364.9	365.7	365.9
4	365.6	365.0	364.4	369.2	366.6	......	365.6	364.9	365.4	364.8	365.4	366.0
5	365.4	......	......	369.2	366.8	365.2	365.6	364.9	365.4	364.9	365.5	366.1
6	365.4	364.8	364.4	369.4	366.6	365.2	365.6	365.0	365.4	364.9	365.5	366.2
7	365.2	364.8	364.4	369.4	......	365.4	365.6	364.8	365.5	364.9	365.6	366.1
8	......	364.8	364.4	369.4	366.6	365.2	365.4	364.5	365.5	364.7	365.8	366.1
9	365.4	364.8	364.4	......	366.4	365.2	......	364.4	365.5	364.8	365.8	366.1
10	365.4	364.8	364.4	369.2	366.4	365.2	365.4	364.4	......	364.8	365.9	366.4
11	365.4	364.8	364.4	369.2	366.4	......	365.4	364.3	365.4	364.9	365.9	366.7
12	365.4	......	......	369.0	366.4	365.2	365.2	364.2	365.4	365.0	365.9	366.2
13	365.6	364.8	364.4	369.0	366.2	365.2	365.2	......	365.4	365.1	365.8	366.0
14	365.6	364.8	364.4	368.8	......	365.2	365.2	365.0	365.3	365.2	365.9	365.9
15	......	364.8	364.4	368.6	366.2	365.2	365.2	365.2	365.3	365.4	365.8	365.9
16	365.4	364.8	364.4	......	366.0	365.2	......	365.3	365.4	365.2	365.7	365.8
17	365.4	364.6	364.4	368.0	366.0	365.2	365.2	365.4	365.4	365.0	365.6	365.8
18	365.4	364.6	364.4	368.0	366.0	......	365.2	365.3	365.3	364.9	365.8	365.7
19	365.4	......	......	368.0	365.8	365.6	365.2	365.3	365.3	364.6	365.8	365.6
20	365.4	364.6	364.4	367.8	365.8	365.6	365.2	......	365.4	364.5	365.7	365.5
21	365.2	364.6	364.6	367.8	......	365.6	365.0	365.3	365.3	364.4	365.7	365.5
22	......	364.6	364.8	367.6	365.6	365.8	365.0	365.2	365.2	364.6	365.7	365.8
23	365.2	364.6	365.0	......	365.4	365.8	......	365.0	365.2	365.0	365.6	366.0
24	365.6	364.6	365.2	367.6	365.6	365.8	364.8	364.9	365.2	365.1	365.7	365.9
25	365.8	364.6	365.8	367.4	365.6	365.8	364.8	364.7	365.2	365.4	365.6	365.9
26	366.0	......	......	367.4	365.4	365.8	364.9	364.6	365.2	365.5	365.5	366.0
27	366.0	364.4	367.6	367.2	365.4	366.0	364.9	......	365.1	365.7	365.3	366.0
28	365.6	364.6	368.2	367.2	......	365.8	364.9	364.7	365.2	365.5	365.0	366.1
29	......	......	368.6	367.0	365.4	365.8	365.1	364.7	365.1	365.4	364.9	366.3
30	365.6	......	368.8	......	365.4	365.8	......	364.8	365.1	365.4	364.9	366.0
31	365.6	......	369.0	......	365.2	......	365.2	364.9	......	365.4	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oneida River above Oak Orchard Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	366.2	366.6	365.8	366.5	366.3	365.4	365.1	365.2	364.6	364.7	364.4	364.9
2	366.3	366.4	365.7	366.7	366.2	365.4	365.1	365.2	364.8	364.8	364.4	365.0
3	366.2	366.5	365.8	366.7	366.1	365.3	365.1	365.1	364.7	364.8	364.5	364.9
4	366.3	366.3	365.9	366.8	366.3	365.3	365.2	365.1	364.6	364.7	364.4	364.9
5	366.4	366.2	366.0	366.8	366.4	365.3	365.3	365.2	364.6	364.6	364.4	364.8
6	366.4	366.2	366.0	366.8	366.4	365.2	365.2	365.2	364.6	364.7	364.4	364.9
7	366.4	366.1	366.0	366.8	366.3	365.2	365.2	365.1	364.6	364.7	364.4	365.0
8	366.4	366.0	366.0	366.7	366.2	365.3	365.2	365.2	364.6	364.8	364.4	365.2
9	366.3	365.9	365.9	367.1	366.2	365.4	365.0	365.2	364.7	365.0	364.4	365.4
10	366.3	365.9	365.9	367.4	366.1	365.5	365.0	365.1	364.7	364.8	364.4	365.3
11	366.2	365.8	365.9	367.3	366.0	365.5	364.9	365.2	364.6	364.9	364.4	365.3
12	366.2	365.8	365.8	367.2	366.0	365.4	364.9	365.0	364.5	364.9	364.5	365.2
13	366.1	365.8	365.8	367.2	366.0	365.5	365.0	364.9	364.5	364.9	364.5	365.1
14	366.0	365.6	366.0	367.3	366.0	365.5	365.0	364.9	364.6	364.9	364.4	365.3
5	366.0	365.5	365.9	367.3	366.1	365.5	365.0	364.8	364.5	364.8	364.3	365.4
16	366.0	365.5	365.8	367.3	366.0	365.5	364.9	365.1	364.5	364.8	364.4	365.4
17	366.0	365.5	365.7	367.4	366.0	365.6	364.9	365.0	364.5	364.9	364.5	365.4
18	366.0	365.5	365.6	367.4	365.9	365.6	364.8	365.0	364.5	365.0	364.6	365.4
19	366.0	365.4	365.5	367.3	365.8	365.6	364.8	365.0	364.4	365.0	364.6	365.3
20	366.0	365.4	365.5	367.3	365.8	365.5	364.8	365.2	364.5	365.1	364.6	365.3
21	366.1	365.4	365.4	367.2	365.7	365.4	364.7	365.2	364.5	364.9	364.7	365.3
22	366.2	365.6	365.3	367.2	365.7	365.3	364.8	365.1	364.6	364.9	364.8	365.3
23	366.4	365.6	365.2	367.2	365.6	365.3	364.8	365.0	364.6	364.8	364.7	365.3
24	366.5	365.6	365.1	366.8	365.5	365.3	364.7	365.0	364.7	*364.2	364.7	365.2
25	366.7	365.6	365.1	366.8	365.5	365.2	364.7	364.9	364.7	364.2	364.8	365.1
26	366.8	365.7	365.1	366.7	365.4	365.2	364.7	364.9	364.7	364.2	364.9	365.1
27	366.8	365.5	365.2	366.7	365.4	365.2	364.6	364.9	364.6	364.2	364.9	365.2
28	366.8	365.6	365.4	366.6	365.5	365.2	364.6	364.9	364.6	364.3	364.9	365.3
29	366.8	......	366.1	366.6	365.6	365.2	†365.2	364.8	364.6	364.4	365.0	365.2
30	366.7	......	366.3	366.5	365.5	365.1	364.9	364.8	364.7	364.4	365.0	365.5
31	366.6	......	366.5	......	365.5	......	365.1	364.7	......	364.4	......	365.7

Flash-boards off. † Flash-boards on.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oneida River below Caughdenoy Lock.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	371.0	367.9	365.7	365.7	365.7	364.9	365.9	......
2	......	......	......	......	370.9	367.7	365.6	365.7	365.5	......	366.0	......
3	......	......	......	......	370.8	367.4	......	365.7	365.5	365.1	365.8	......
4	......	......	......	......	370.8	367.2	365.7	365.6	......	365.1	365.7	......
5	......	......	......	......	370.7	......	365.6	365.6	365.5	365.2	365.9	......
6	......	......	......	......	370.5	367.1	365.7	365.6	365.5	365.1	......	......
7	......	......	......	......	370.3	367.0	365.6	......	365.5	365.1	365.6	......
8	......	......	......	......	......	367.0	365.6	365.5	365.5	365.2	365.6	......
9	......	......	......	......	370.2	366.9	365.6	365.5	365.6	......	365.6	......
10	......	......	......	......	369.9	367.1	......	365.5	365.5	365.3	365.5	......
11	......	......	......	......	369.7	366.8	365.5	365.4	......	365.2	365.5	......
12	......	......	......	......	369.6	......	365.5	365.4	365.4	365.5	365.5	......
13	......	......	......	......	369.4	366.9	365.3	365.4	365.4	365.8	......	......
14	......	......	......	......	369.3	366.7	365.3	......	365.4	365.3	365.0	......
15	......	......	......	......	......	366.6	365.3	365.4	365.4	365.4	365.3	......
16	......	......	......	......	368.8	366.5	365.3	365.4	365.4	......	365.2	......
17	......	......	......	......	368.9	366.5	......	365.3	365.3	365.5	365.2	......
18	......	......	......	......	368.8	366.4	365.4	365.3	......	365.5	365.6	......
19	......	......	......	......	368.8	......	365.3	365.3	365.3	365.5	365.2	......
20	......	......	......	......	368.6	366.4	365.3	365.5	365.4	365.8	......	......
21	......	......	......	......	368.5	366.2	365.3	......	365.3	365.4	365.0	......
22	......	......	......	371.3	......	366.0	365.3	365.6	365.4	365.7	365.2	......
23	......	......	......	371.2	368.2	366.1	365.4	365.7	365.4	......	365.1	......
24	......	......	......	371.0	368.2	366.1	......	365.8	365.4	365.8	365.2	......
25	......	......	......	370.8	368.2	366.0	365.3	365.7	......	366.0	365.0	......
26	......	......	......	370.8	368.1	......	365.3	365.6	364.9	365.9	365.1	......
27	......	......	......	370.9	367.6	365.8	365.7	365.7	364.9	365.8	......	......
28	......	......	......	371.0	367.9	365.9	365.7	......	364.9	366.0	365.1	......
29	......	......	......	371.1	......	365.9	365.7	365.6	365.0	365.9	365.3	......
30	......	......	......	371.0	367.8	365.8	365.7	365.6	365.0	......	365.0	......
31	......	......	......	......	367.7	......	......	365.6	......	365.9	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oneida River below Caughdenoy Lock.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	371.7	369.4	366.4	367.3	366.2	365.9	......	366.7	366.9
2	......	......	......	371.9	369.3	366.4	......	366.3	366.0	365.9	366.5	367.5
3	......	......	......	371.9	369.2	366.2	367.3	366.3	......	365.8	367.2	......
4	......	......	......	372.0	369.1	......	367.4	366.2	366.5	365.8	366.7	367.5
5	......	......	......	372.2	369.1	366.2	367.4	366.2	366.6	365.8	......	367.7
6	......	......	......	372.2	368.8	366.1	367.3	......	366.7	365.8	367.4	367.7
7	......	......	......	372.4	368.7	366.4	367.2	366.1	366.9	365.8	366.8	367.8
8	......	......	......	372.4	368.7	366.2	367.1	366.1	366.9	......	367.1	367.8
9	......	......	......	372.3	368.3	366.2	......	366.3	366.9	365.6	367.0	367.9
10	......	......	......	372.2	367.9	366.3	366.9	366.1	......	365.8	367.1	......
11	......	......	......	372.0	368.3	......	366.8	366.0	366.8	366.0	367.2	368.5
12	......	......	......	371.9	368.3	366.2	366.8	366.2	366.9	365.9	......	368.0
13	......	......	......	371.9	368.1	366.3	366.7	......	366.7	366.1	366.9	367.9
14	......	......	......	371.9	368.1	366.2	366.7	366.0	366.7	366.6	367.2	367.7
15	......	......	......	371.7	368.0	366.3	366.6	366.2	366.8	......	367.2	367.4
16	......	......	......	371.5	367.8	366.2	......	366.1	366.6	366.7	366.8	367.4
17	......	......	......	371.2	367.7	366.2	366.6	366.2	......	366.7	366.9	......
18	......	......	......	371.0	367.7	......	366.6	366.3	366.6	366.8	367.0	367.4
19	......	......	......	370.9	367.4	366.9	366.5	366.2	366.6	366.7	......	367.4
20	......	......	......	370.7	367.4	367.0	366.4	......	366.6	366.9	366.9	367.3
21	......	......	......	370.6	367.3	366.9	366.4	366.1	366.6	367.1	366.9	367.4
22	......	......	......	370.5	367.3	367.2	366.3	366.0	366.5	......	366.8	367.6
23	......	......	......	370.4	367.1	367.1	......	365.9	366.4	366.9	366.7	367.5
24	......	......	366.4	370.4	367.0	367.3	366.1	365.9	......	367.0	366.8	......
25	......	......	367.0	370.2	366.9	......	365.9	365.8	366.3	366.9	366.6	367.7
26	......	......	368.1	370.1	366.9	367.4	365.9	365.7	366.2	366.8	......	367.7
27	......	......	369.3	369.9	366.8	367.4	365.8	......	366.2	367.0	366.3	367.7
28	......	......	370.1	369.8	366.7	367.5	365.7	365.6	366.1	366.8	366.8	367.9
29	......	......	370.6	369.7	366.6	367.5	365.7	365.6	366.1	......	366.7	368.1
30	......	......	371.0	369.5	366.5	367.4	......	365.7	366.0	366.7	366.4	367.6
31	......	......	371.4	......	366.5	......	366.2	365.9	......	366.7	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oneida River below Caughdenoy Lock.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	367.8	368.5	367.2	.....	368.0	366.5	.....	365.8	365.3	365.1	364.9	365.6
2	367.9	368.3	367.0	368.5	368.2	366.4	366.3	365.8	.....	365.1	365.0	.....
3	367.8	368.5	367.2	368.6	367.8	.....	366.2	365.8	365.2	365.1	364.9	365.8
4	367.9	.....	.....	368.5	368.2	366.3	366.3	365.8	365.2	365.1	.....	365.7
5	367.9	368.0	367.4	368.7	368.2	366.2	366.3	.....	365.2	365.2	365.0	365.7
6	368.1	367.8	367.6	368.8	.....	366.1	366.3	365.9	365.1	365.2	364.9	366.1
7	.....	367.6	367.6	368.8	368.0	366.1	366.2	365.8	365.1	.....	364.9	366.3
8	368.2	367.6	367.5	.....	367.8	366.3	.....	365.8	365.1	365.2	365.0	366.6
9	368.1	367.5	367.3	369.1	368.0	366.8	366.1	365.8	.....	365.4	364.9	.....
10	368.1	367.3	367.3	369.6	367.5	.....	366.1	365.8	365.1	365.3	364.9	366.7
11	368.0	.....	.....	369.4	367.6	366.8	366.1	365.7	365.1	365.3	.....	366.4
12	368.0	367.3	367.2	369.2	367.7	366.9	366.2	365.7	365.1	365.3	365.0	366.4
13	367.9	367.3	367.2	369.3	.....	366.9	366.2	365.7	365.0	365.2	365.1	366.2
14	.....	367.0	367.1	369.4	367.7	366.8	366.1	365.6	364.9	.....	365.1	366.3
15	367.8	366.9	367.1	.....	367.6	366.7	.....	365.5	365.0	365.2	365.1	366.4
16	367.8	366.9	366.9	369.5	367.5	366.7	366.0	365.6	.....	365.2	365.0	.....
17	367.7	366.8	366.8	369.6	367.5	.....	365.9	365.6	365.0	365.4	365.1	366.7
18	367.8	.....	.....	369.6	367.4	367.0	365.8	365.6	365.0	365.4	.....	366.7
19	367.8	366.6	366.8	369.5	367.3	366.9	365.8	.....	364.9	365.6	365.2	366.7
20	367.7	366.6	366.6	369.5	.....	366.7	365.8	365.5	364.9	365.5	365.3	366.8
21	367.9	366.6	366.7	369.4	367.1	366.6	365.7	365.6	364.9	.....	365.3	366.8
22	368.0	366.6	366.5	.....	367.1	366.6	.....	365.5	364.9	365.4	365.3	366.7
23	368.2	366.9	366.5	369.1	366.9	366.4	365.6	365.5	.....	365.2	365.3	.....
24	368.3	366.9	366.5	369.0	366.7	.....	365.6	365.5	365.0	364.9	365.4	366.6
25	368.6	.....	.....	368.9	366.6	366.4	365.5	365.5	365.2	364.9	.....	366.5
26	368.8	367.1	366.4	368.8	366.4	366.3	365.6	.....	365.1	364.8	365.6	366.4
27	368.9	367.2	366.7	368.7	.....	366.2	365.6	365.5	365.0	364.9	365.4	366.3
28	.....	367.0	367.3	368.5	366.7	366.2	365.5	365.4	365.0	.....	365.6	366.3
29	368.7	.....	367.6	.....	366.6	366.1	.....	365.4	365.1	364.9	365.7	366.2
30	368.7	.....	368.0	368.3	366.6	366.1	365.8	365.4	.....	364.9	365.8	.....
31	368.5	.....	368.2	.....	366.5	.....	365.8	365.4	.....	364.9	.....	366.8

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oneida River above Caughdenoy Lock.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	.....	.....	.....	.....	373.3	371.5	370.1	369.7	369.9	369.6	370.5	.....
2	.....	.....	.....	.....	373.2	371.4	369.9	369.6	369.7	.....	370.6	.....
3	.....	.....	.....	.....	373.2	371.2	.....	369.5	369.7	369.8	370.5	.....
4	.....	.....	.....	.....	373.1	371.1	370.1	369.6	.....	370.0	370.4	.....
5	.....	.....	.....	.....	373.0	.....	370.0	369.6	369.7	370.0	370.5	.....
6	.....	.....	.....	.....	373.0	370.9	370.1	369.6	369.7	370.0	.....	.....
7	.....	.....	.....	.....	372.9	370.9	370.0	.....	369.7	370.0	370.4	.....
8	.....	.....	.....	.....	.....	371.0	370.0	369.5	369.7	370.0	370.4	.....
9	.....	.....	.....	.....	372.8	370.9	370.1	369.5	369.8	.....	370.4	.....
10	.....	.....	.....	.....	372.6	370.9	.....	369.6	369.7	370.1	370.3	.....
11	.....	.....	.....	.....	372.5	370.8	369.9	369.4	.....	370.0	370.3	.....
12	.....	.....	.....	.....	372.4	.....	369.9	369.4	369.6	370.3	370.3	.....
13	.....	.....	.....	.....	372.3	370.9	369.7	369.4	369.6	370.4	.....	.....
14	.....	.....	.....	.....	372.3	370.8	369.9	.....	369.6	370.3	370.0	.....
15	.....	.....	.....	.....	.....	370.7	369.9	369.3	369.3	370.2	370.1	.....
16	.....	.....	.....	.....	372.0	370.5	369.9	369.4	369.5	.....	370.1	.....
17	.....	.....	.....	.....	372.1	370.6	.....	369.3	369.5	370.3	370.1	.....
18	.....	.....	.....	.....	372.1	370.6	369.8	369.1	.....	370.3	370.2	.....
19	.....	.....	.....	.....	372.0	.....	369.9	369.2	369.5	370.3	370.1	.....
20	.....	.....	.....	.....	371.9	370.6	369.8	369.5	369.6	370.5	.....	.....
21	.....	.....	.....	.....	371.8	370.5	369.8	.....	369.5	370.1	370.0	.....
22	.....	.....	.....	373.5	.....	370.3	369.8	369.7	369.5	370.2	370.2	.....
23	.....	.....	.....	373.4	371.7	370.4	369.9	369.8	369.5	.....	370.1	.....
24	.....	.....	.....	373.3	371.7	370.4	.....	370.0	369.5	370.4	370.2	.....
25	.....	.....	.....	373.2	371.6	370.4	369.8	370.0	.....	370.5	369.9	.....
26	.....	.....	.....	373.2	371.6	.....	369.8	369.7	369.6	370.5	370.1	.....
27	.....	.....	.....	373.3	371.1	370.1	369.7	369.9	369.6	370.5	.....	.....
28	.....	.....	.....	373.2	371.5	370.3	369.7	.....	369.7	370.5	370.0	.....
29	.....	.....	.....	373.3	.....	370.3	369.7	369.8	369.8	370.5	370.3	.....
30	.....	.....	.....	373.3	371.4	370.2	369.8	369.9	369.8	.....	370.0	.....
31	.....	.....	.....	.....	371.3	.....	.....	369.7	.....	370.5	.....	.....

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oneida River above Caughdenoy Lock.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	373.5	372.3	370.6	371.1	370.4	370.3	......	370.9	371.0
2	......	......	......	373.6	372.2	370.6	......	370.4	370.2	370.5	370.8	370.9
3	......	......	......	373.7	372.2	370.5	371.0	370.4	......	370.3	371.2	......
4	......	......	......	373.7	372.1	......	371.1	370.5	370.6	370.3	370.9	371.0
5	......	......	......	373.8	372.1	370.6	371.1	370.4	370.6	370.3	......	371.4
6	......	......	......	373.8	372.0	370.5	371.0	......	370.7	370.4	371.3	371.4
7	......	......	......	374.0	371.8	370.8	371.0	370.3	370.8	370.3	371.1	371.5
8	......	......	......	374.0	371.9	370.5	370.9	370.4	370.8	......	371.1	371.5
9	......	......	......	373.9	371.6	370.5	......	370.5	370.8	370.3	371.0	371.6
10	......	......	......	373.9	371.8	370.6	370.8	370.4	......	370.4	371.1	......
11	......	......	......	373.8	371.8	......	370.7	370.4	370.8	370.3	371.1	371.4
12	......	......	......	373.7	371.7	370.5	370.8	370.4	370.7	370.2	......	371.2
13	......	......	......	373.7	371.6	370.5	370.7	......	370.6	370.4	371.0	371.3
14	......	......	......	373.6	371.6	370.5	370.7	370.4	370.7	370.8	371.2	371.3
15	......	......	......	373.5	371.6	370.6	370.7	370.6	370.8	......	371.1	371.4
16	......	......	......	373.4	371.5	370.5	......	370.3	370.7	370.8	370.9	371.3
17	......	......	......	373.2	371.4	370.5	370.6	370.4	......	370.8	371.0	......
18	......	......	......	373.2	371.4	......	370.6	370.5	370.7	370.9	371.1	371.1
19	......	......	......	373.1	371.2	370.7	370.6	370.5	370.7	370.8	......	371.1
20	......	......	......	373.0	371.2	370.9	370.5	......	370.7	371.0	371.1	371.0
21	......	......	......	372.9	371.1	370.9	370.5	370.4	370.7	370.7	371.0	371.1
22	......	......	......	372.9	371.1	371.0	370.4	370.4	370.7	......	371.0	371.1
23	......	......	......	372.8	371.1	371.0	......	370.3	370.6	371.1	370.9	371.3
24	......	......	370.3	372.8	371.0	371.1	370.3	370.3	......	371.0	371.0	......
25	......	......	370.9	372.7	370.9	......	370.2	370.2	370.6	371.0	370.8	371.4
26	......	......	371.4	372.6	370.9	371.2	370.2	370.2	370.6	371.0	......	371.4
27	......	......	371.9	372.5	370.9	371.1	370.2	......	370.5	371.1	370.8	371.4
28	......	......	372.2	372.5	370.8	371.2	370.2	370.1	370.4	370.9	370.9	371.5
29	......	......	372.6	372.4	370.8	371.2	370.2	370.1	370.5	......	370.8	371.5
30	......	......	372.9	372.3	370.7	371.1	......	370.2	370.4	370.9	370.7	371.2
31	......	......	373.2	......	370.7	......	370.3	370.3	......	370.9	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oneida River above Caughdenoy Lock.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	371.4	371.9	371.1	......	371.6	370.6	......	369.8	369.2	368.9	369.6	370.4
2	371.5	371.8	371.1	371.8	371.7	370.5	370.6	369.9	......	368.9	369.6	......
3	371.4	371.8	371.2	371.9	371.4	......	370.5	369.9	369.1	368.9	369.6	370.4
4	371.6	......	......	371.8	371.7	370.6	370.4	369.9	369.1	368.9	......	370.4
5	371.5	371.6	371.3	371.9	371.6	370.5	370.5	......	369.1	369.0	369.6	370.4
6	371.5	371.6	371.4	371.9	......	370.5	370.5	369.8	369.0	369.0	369.6	370.5
7	......	371.5	371.4	372.0	371.6	370.5	370.5	369.8	369.0	......	369.5	370.5
8	371.5	371.4	371.3	......	371.5	370.7	......	369.8	369.0	368.8	369.5	370.5
9	371.4	371.4	371.3	372.2	371.6	370.9	370.4	369.8	......	368.8	369.7	......
10	371.4	371.3	371.3	372.3	371.3	......	370.4	369.9	369.0	368.9	369.6	370.5
11	371.3	......	......	372.1	371.4	370.9	370.4	369.7	369.0	369.0	......	370.5
12	371.3	371.2	371.2	372.2	371.4	370.9	370.5	......	369.0	369.0	369.7	370.5
13	371.2	370.9	371.2	372.2	......	370.9	370.5	369.7	369.0	369.0	369.7	370.5
14	......	370.7	371.1	372.3	371.4	370.8	370.4	369.6	368.9	......	369.7	370.6
15	371.3	371.0	371.1	......	371.3	370.8	......	369.6	368.9	369.0	369.9	370.6
16	371.3	371.0	371.0	372.3	371.3	370.9	370.3	369.5	......	368.9	369.6	......
17	371.2	370.9	371.0	372.4	371.3	......	370.3	369.6	368.8	368.9	369.9	370.7
18	371.1	......	......	372.4	371.2	370.9	370.2	369.5	368.8	369.0	......	370.8
19	371.1	370.9	371.0	372.3	371.1	370.9	370.2	......	368.8	369.0	369.9	370.8
20	371.1	370.9	370.8	372.3	......	370.8	370.2	369.4	368.8	369.1	369.9	370.8
21	......	370.9	370.9	372.4	371.1	370.7	370.1	369.5	368.8	......	370.0	370.8
22	371.3	370.9	370.8	......	371.0	370.8	......	369.6	368.8	369.3	370.0	370.8
23	371.4	371.0	370.8	372.2	370.9	370.6	370.1	369.5	......	369.3	370.0	......
24	371.7	371.0	370.8	372.0	370.8	......	370.0	369.5	368.9	369.3	370.0	370.7
25	372.0	......	......	372.0	370.8	370.6	370.0	369.5	368.8	369.3	......	370.8
26	372.1	371.1	370.8	371.9	370.8	370.6	370.0	......	368.7	369.3	370.2	370.8
27	372.1	371.2	370.7	371.9	......	370.5	370.0	369.4	368.8	369.4	370.3	370.8
28	......	371.1	371.0	371.8	370.8	370.5	370.0	369.3	368.8	......	370.3	370.7
29	372.1	......	371.3	......	370.8	370.5	......	369.3	368.9	369.3	370.3	370.7
30	372.0	......	371.5	371.7	370.8	370.3	369.8	369.3	......	369.5	370.4	......
31	371.9	......	371.6	......	370.7	......	369.8	369.2	......	369.5	......	370.8

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oneida River at Brewerton Bridge (Foot of Oneida lake).

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	374.1	371.9	370.4	369.9	370.0	369.8	370.7	370.0
2	......	......	......	......	374.0	371.8	370.3	369.9	369.9	......	370.8	370.1
3	......	......	......	......	373.9	371.6	370.3	369.9	369.9	370.0	370.7	370.2
4	......	......	......	......	373.8	371.5	370.3	369.9	......	370.1	370.6	......
5	......	......	......	......	373.7	......	370.3	369.9	369.9	370.1	370.6	370.0
6	......	......	......	......	373.7	371.3	370.4	369.9	369.9	370.1	......	370.1
7	......	......	......	......	373.6	371.3	370.3	......	369.9	370.1	370.6	370.0
8	......	......	......	......	......	371.3	370.2	369.8	369.9	370.1	370.6	370.1
9	......	......	......	......	373.5	371.3	370.3	369.8	369.9	......	370.6	370.1
10	......	......	......	......	373.2	371.4	......	369.9	369.8	370.2	370.5	370.0
11	......	......	......	......	373.1	371.1	370.2	369.6	......	370.1	370.5	......
12	......	......	......	......	373.0	......	370.1	369.6	369.7	370.5	370.4	370.1
13	......	......	......	......	373.0	371.1	370.0	369.6	369.7	370.4	......	369.9
14	......	......	......	......	372.9	371.1	370.1	......	369.7	370.5	370.3	369.9
15	......	......	......	......	372.8	371.0	370.1	369.5	369.6	370.4	370.3	369.9
16	......	......	......	......	372.8	371.0	370.1	369.5	369.7	......	370.3	369.8
17	......	......	......	......	372.8	371.0	......	369.4	369.6	370.4	370.4	369.9
18	......	......	......	......	372.8	370.8	370.1	369.3	......	370.4	370.4	......
19	......	......	......	......	372.6	......	370.1	369.4	369.6	370.4	370.4	369.9
20	......	......	......	......	372.4	370.9	370.1	369.5	369.7	370.5	......	369.9
21	......	......	......	......	372.3	370.6	370.1	......	369.6	370.4	370.3	369.9
22	......	......	......	374.2	......	370.6	370.0	369.9	369.7	370.5	370.3	369.8
23	......	......	......	374.2	372.1	370.7	370.1	369.9	369.7	......	370.2	369.8
24	......	......	......	374.0	372.1	370.6	......	370.1	369.7	370.6	370.1	369.9
25	......	......	......	373.8	372.0	370.6	370.0	370.1	......	370.7	370.1	......
26	......	......	......	374.0	371.9	......	369.9	369.8	369.7	370.7	370.2	369.9
27	......	......	......	374.0	371.8	370.6	370.0	370.1	369.8	370.6	......	369.9
28	......	......	......	374.0	371.8	370.6	370.0	......	369.8	370.7	370.2	370.0
29	......	......	......	374.1	......	370.5	370.0	369.9	369.9	370.7	370.1	370.1
30	......	......	......	374.1	371.8	370.4	370.0	370.0	369.8	......	370.2	370.3
31	......	......	......	......	371.8	......	......	369.9	......	370.7	......	370.3

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oneida River at Brewerton Bridge (Foot of Oneida lake).

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	370.8	370.3	374.6	372.7	370.9	371.5	370.6	370.4	......	371.0	371.6
2	370.9	370.8	370.3	......	372.7	370.9	......	370.6	370.5	370.7	371.0	371.0
3	370.9	370.8	370.3	374.7	372.7	370.8	371.5	370.6	......	370.6	371.3	......
4	370.9	370.7	370.3	374.7	372.7	......	371.4	370.7	370.6	370.5	371.1	371.7
5	370.9	......	......	374.8	372.7	370.7	371.4	370.6	370.9	370.5	......	371.8
6	371.1	370.8	370.1	374.9	372.5	370.7	371.4	......	371.0	370.6	371.6	371.7
7	370.9	370.6	370.4	375.1	372.1	371.0	371.3	370.6	371.1	370.5	371.3	371.8
8	......	370.6	370.2	375.1	372.3	370.7	371.2	370.6	371.1	......	371.1	371.9
9	371.1	370.6	370.2	......	372.3	370.7	......	370.6	371.1	370.4	371.1	372.1
10	371.1	370.6	370.1	374.8	372.1	370.8	371.2	370.6	......	370.6	371.4	......
11	371.0	370.5	370.2	374.8	372.1	......	371.1	370.6	371.1	370.5	371.4	371.9
12	371.1	......	......	374.7	372.0	370.7	371.1	370.6	371.1	370.5	......	371.9
13	371.1	370.6	370.2	374.7	......	370.7	371.1	......	371.1	370.5	371.4	371.9
14	371.1	370.6	370.2	374.6	......	370.7	371.0	370.6	371.1	370.9	371.5	371.8
15	......	370.5	370.1	374.4	371.9	370.7	371.0	370.8	371.2	......	371.5	371.9
16	371.0	370.5	370.1	......	371.9	370.7	......	370.6	371.0	371.0	371.4	371.8
17	371.0	370.5	370.1	374.1	371.8	370.7	371.0	370.7	......	371.1	371.4	......
18	370.9	370.4	370.1	374.0	371.7	......	370.9	370.7	371.0	371.1	371.4	371.6
19	370.9	......	......	373.9	371.6	371.1	370.9	370.7	371.1	371.1	......	371.5
20	370.9	370.4	370.2	373.9	371.5	371.1	370.8	......	371.0	371.2	371.3	371.4
21	371.0	370.4	370.3	373.6	......	371.2	370.8	370.6	371.0	371.3	371.3	371.5
22	......	370.4	370.5	373.6	371.4	371.3	370.8	370.6	371.0	......	371.3	371.4
23	370.9	370.3	370.7	......	371.4	371.4	......	370.5	370.9	371.3	371.2	371.6
24	371.1	370.3	370.9	373.6	371.4	371.4	370.6	370.5	......	371.2	371.2	......
25	370.8	370.3	371.3	373.5	371.3	......	370.4	370.5	370.8	371.2	371.1	371.
26	370.9	......	......	373.4	371.1	371.4	370.4	370.4	370.8	371.3	......	371.8
27	370.9	370.3	372.1	373.3	371.1	371.4	370.4	......	370.8	371.3	371.0	371.8
28	370.8	370.3	372.7	373.1	......	371.5	370.4	370.4	370.7	371.2	371.1	371.9
29	......	......	373.2	373.0	371.0	371.4	370.5	370.3	370.6	......	371.0	371.9
30	370.9	......	373.6	......	371.0	371.5	......	370.4	370.6	371.1	371.1	371.8
31	370.9	......	374.1	......	371.0	......	370.6	370.4	......	371.1	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Oneida River at Brewerton Bridge (Foot of Oneida lake).

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	372.0	372.3	371.4	......	372.2	370.8	......	369.9	369.4	369.0	369.7	370.5
2	372.0	372.2	371.4	372.3	372.1	370.7	370.8	369.9	......	369.0	369.7	......
3	372.0	372.3	371.5	372.3	372.0	......	370.7	369.9	369.3	369.0	369.7	370.6
4	371.9	......	......	372.4	372.0	370.7	370.6	369.9	369.3	369.1	......	370.6
5	372.0	372.0	371.6	372.5	372.0	370.7	370.7	......	369.3	369.1	369.7	370.7
6	372.0	371.9	371.7	372.5	......	370.6	370.7	370.0	369.3	369.2	369.7	370.7
7	......	371.8	371.7	372.6	371.9	370.6	370.7	370.0	369.1	......	369.7	370.7
8	372.0	371.7	371.6	......	371.9	370.7	......	370.0	369.1	368.9	369.7	370.7
9	371.9	371.6	371.6	372.5	371.8	371.0	370.6	369.9	369.1	368.9	369.7	......
10	371.9	371.5	371.6	372.5	371.6	......	370.6	369.9	369.1	369.0	369.8	370.7
11	371.8	......	......	372.6	371.7	371.1	370.6	369.9	369.1	369.1	......	370.7
12	371.8	371.5	371.6	372.7	371.6	371.1	370.6	......	369.1	369.1	369.8	370.8
13	371.8	371.4	371.5	372.7	......	371.0	370.6	369.9	369.1	369.1	369.8	370.8
14	......	371.4	371.4	372.8	371.6	370.9	370.6	369.8	369.1	......	369.8	370.9
15	371.8	371.3	371.4	......	371.6	370.9	......	369.8	369.1	369.1	370.0	370.9
16	371.8	371.3	371.3	372.9	371.6	370.9	370.4	369.8	369.0	369.1	369.9	370.9
17	371.7	371.2	371.3	373.0	371.5	......	370.4	369.8	368.9	369.1	369.9	370.9
18	371.6	......	......	373.0	371.4	370.9	370.4	369.7	368.9	369.2	......	370.9
19	371.6	371.1	371.2	373.0	371.2	370.8	370.3	......	368.9	369.2	370.0	370.9
20	371.5	371.1	371.2	372.9	......	370.8	370.3	369.6	368.9	369.2	370.0	370.9
21	......	371.1	371.1	372.9	371.2	370.9	370.3	369.7	368.9	......	370.1	370.9
22	371.7	371.1	371.1	......	371.2	370.9	......	369.6	368.9	369.4	370.1	370.9
23	371.8	371.2	371.1	372.6	371.1	370.8	370.3	369.6	369.1	369.4	370.1	......
24	372.1	371.3	371.1	372.6	371.0	......	370.2	369.6	369.0	369.4	370.1	371.1
25	372.4	......	......	372.5	371.0	370.8	370.2	369.6	369.0	369.5	......	371.1
26	372.6	371.4	371.3	372.4	370.9	370.7	370.1	......	369.0	369.5	370.3	371.1
27	372.6	371.4	371.4	372.3	......	370.7	370.1	369.4	369.0	369.5	370.4	371.0
28	......	371.4	371.6	372.3	371.1	370.6	370.1	369.5	369.0	......	370.4	371.0
29	372.5	......	371.7	......	371.0	370.6	370.0	369.5	369.0	369.6	370.4	371.0
30	372.4	......	371.9	372.2	371.0	370.6	370.0	369.4	......	369.6	370.5	......
31	372.3	......	372.1	......	370.9	......	369.9	369.4	......	369.6	......	371.1

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Fish Creek at Sylvan Beach, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	374.7	373.1	371.1	371.5	370.8	370.6	371.1	371.3	371.5
2	......	......	......	374.7	373.0	371.0	371.5	370.7	370.6	371.1	371.5	371.5
3	......	......	......	374.7	373.0	371.0	371.5	370.8	370.7	371.0	371.4	371.5
4	......	......	......	374.7	372.9	371.0	371.5	370.8	370.9	371.0	371.4	371.8
5	......	......	......	374.8	372.8	371.0	371.5	370.7	371.3	371.0	371.4	371.8
6	......	......	......	374.9	372.7	371.0	371.4	370.7	371.2	370.9	371.4	371.8
7	......	......	......	375.2	372.6	371.2	371.4	370.8	371.2	370.8	371.5	371.7
8	......	......	......	375.4	372.5	370.8	371.4	370.8	371.3	370.8	371.6	371.7
9	......	......	......	374.9	372.4	370.8	371.3	370.8	371.3	370.8	371.7	371.7
10	......	......	......	374.9	372.3	370.8	371.3	370.7	371.2	370.8	371.7	371.7
11	......	......	......	374.9	372.3	370.8	371.3	370.7	371.3	370.7	371.8	371.6
12	......	......	......	374.9	372.3	370.8	371.3	370.7	371.3	370.9	371.8	371.6
13	......	......	......	374.9	372.2	370.8	371.3	370.7	371.2	370.9	371.8	371.6
14	......	......	......	374.9	372.2	370.8	371.2	370.6	371.2	371.1	371.9	371.6
15	......	......	......	374.8	372.1	370.7	371.3	370.6	371.2	371.0	371.9	371.6
16	......	......	......	374.8	372.1	370.7	371.3	370.7	371.2	371.2	371.9	371.6
17	......	......	......	374.5	372.0	370.6	371.3	370.8	371.1	371.1	371.8	371.6
18	......	......	......	374.3	372.0	370.8	371.2	370.8	371.2	371.1	371.7	371.6
19	......	......	......	374.2	371.9	371.2	371.0	370.7	371.2	371.2	371.7	371.6
20	......	......	......	373.9	371.8	371.3	371.0	370.7	371.2	371.2	371.5	371.6
21	......	......	......	373.8	371.7	371.3	371.0	370.7	371.3	371.8	371.5	371.7
22	......	......	......	373.8	371.7	371.3	370.9	370.6	371.2	371.5	371.5	371.8
23	......	......	......	373.7	371.5	371.5	370.9	370.6	371.3	371.4	371.4	371.8
24	......	......	......	373.6	371.4	371.5	370.8	370.6	371.3	371.4	371.4	371.8
25	......	......	......	373.5	371.3	371.5	370.8	370.6	371.3	371.4	371.5	371.8
26	......	......	......	373.4	371.1	371.6	370.6	370.5	371.2	371.4	371.4	371.8
27	......	......	......	373.3	371.1	371.7	370.6	370.5	371.1	371.3	371.4	371.8
28	......	......	......	373.3	371.1	371.7	370.6	370.5	371.2	371.3	371.4	371.8
29	......	......	......	373.2	371.1	371.7	370.5	370.5	371.2	371.3	371.4	371.8
30	......	......	......	373.2	371.1	371.6	370.5	370.7	371.2	371.3	371.4	371.8
31	......	......	......	......	371.1	......	370.8	370.6	......	371.3	......	371.8

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Fish Creek at Sylvan Beach, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	372.0	372.4	371.4	372.5	372.3	370.8	370.7	369.9	369.5	369.0	369.8	370.5
2	372.0	372.3	371.4	372.4	372.2	370.7	370.8	369.9	369.4	369.0	369.8	370.5
3	372.0	372.3	371.4	372.4	372.3	370.8	370.7	369.9	369.4	369.1	369.8	370.6
4	372.0	372.2	371.6	372.4	372.3	370.7	370.6	369.9	369.4	369.1	369.6	370.6
5	371.9	372.1	371.7	372.5	372.2	370.7	370.7	370.0	369.4	369.1	369.7	370.7
6	372.0	372.1	371.7	372.6	372.2	370.6	370.7	370.0	369.4	369.3	369.7	370.7
7	*	372.0	371.7	372.6	372.1	370.6	370.7	370.0	369.2	369.1	369.7	370.7
8	*	372.0	371.7	372.6	372.0	370.6	370.5	369.9	362.2	369.1	369.7	370.7
9	*	371.8	371.7	372.5	371.9	370.9	370.5	369.9	369.2	369.0	369.7	370.7
10	*	371.8	371.8	372.6	372.0	370.9	370.6	369.9	369.2	369.0	369.8	370.7
11	*	371.7	371.7	372.7	371.9	371.1	370.6	369.9	369.2	369.1	369.8	370.7
12	*	371.7	371.7	372.9	371.7	371.1	370.6	369.9	369.1	369.1	369.8	370.8
13	*	371.6	371.6	372.8	371.6	371.0	370.6	369.9	369.1	369.1	369.8	370.8
14	*	371.5	371.5	372.8	371.7	370.9	370.6	369.9	369.1	368.9	369.8	370.9
15	*	371.5	371.5	372.9	371.6	370.9	370.5	369.8	369.1	369.1	370.0	370.9
16	371.8	371.4	371.5	373.1	371.6	370.9	370.4	369.8	369.1	369.1	369.9	370.9
17	371.8	371.4	371.5	373.1	371.6	370.9	370.4	369.8	369.0	369.1	369.9	370.9
18	371.8	371.4	371.4	373.1	371.6	370.9	370.4	369.8	369.0	369.2	369.9	370.9
19	371.7	371.4	371.3	373.1	371.5	370.8	370.3	369.7	369.0	369.2	370.0	370.9
20	371.6	371.3	371.3	373.0	371.5	370.8	370.3	369.8	368.9	369.2	370.0	370.9
21	371.6	371.2	371.2	373.0	371.1	370.9	370.3	369.7	368.9	369.2	370.1	370.9
22	371.7	371.2	371.2	373.0	371.1	370.9	370.3	369.7	368.9	369.4	370.1	370.9
23	371.9	371.3	371.2	372.9	371.0	370.8	370.3	369.6	369.1	369.4	370.1	371.2
24	372.5	371.4	371.1	372.9	370.9	370.8	370.3	369.6	369.0	369.6	370.1	371.2
25	372.7	371.3	371.1	372.8	370.9	370.7	370.2	369.6	369.0	369.6	370.1	371.2
26	372.7	371.4	371.3	372.6	370.8	370.7	370.2	369.5	369.0	369.6	370.3	371.2
27	372.7	371.5	371.4	372.5	370.9	370.6	370.2	369.5	369.0	369.5	370.4	371.2
28	372.6	371.4	371.6	372.4	370.9	370.6	370.1	369.6	369.0	369.6	370.4	371.2
29	372.6	......	371.9	372.4	370.9	370.6	370.0	369.6	369.0	369.6	370.4	371.2
30	372.5	......	372.1	372.3	370.9	370.7	370.0	369.5	369.0	369.7	370.5	371.2
31	372.4	......	372.1	......	370.8	......	369.9	369.5	......	369.7	.....	371.2

*Gage out of use.

ONEIDA CREEK AT KENWOOD, N. Y.

A record of the flow of this stream during the latter portion of the low-water season of 1906 has been furnished by the Oneida Community. The record includes the flow through a 24-inch Hercules wheel and a 24-inch Camden water-wheel as well as the flow over the dam when any occurs. The camden water-wheel was little used during this period. The water was drawn below crest level of Sunset lake storage pond and nearly the entire 24-hour flow of the stream passed through the wheels during the 10¼ hours' daily run. No adequate records were kept during the first three weeks of September. The run of the mill, however, indicates that the flow was considerably less than during the period covered by the record. A gaging record of this stream in 1900 showed a minimum flow for several days of 13 to 15 second-feet, or an average of 0.222 second-foot per square mile, from a tributary drainage area of 63 square miles.

Estimated flow, in Second-feet, of Oneida Creek, at Kenwood, N. Y.
SEPTEMBER, 1906.

DAYS.	22	23	24	25	26	27	28	29	30			
Flow in second-feet....	22.5	*	19.0	17.9	17.3	15.0	13.8	16.2	*	.....	.....	.....

OCTOBER, 1906.

Days.	1	2	3	4	5	6	7	8	9	10	11	12
Flow in second-feet....	19.3	13.8	13.8	.....	21.0	26.2	61.5	46.0	24.7	19.6	23.5	23.2
Days.	13	14	15	16	17	18	19	20	21	22	23	24
Flow in second-feet....	24.5	19.2	32.3	17.9	16.1	16.1	17.3	16.9	136.0	61.7	39.4	24.2

* Sunday.

LIMESTONE CREEK AT FAYETTEVILLE, ONONDAGA COUNTY, N. Y.

This gaging station, which is located above the State dam at the head of the Erie canal feeder in Fayetteville, was established August 27, 1905, by C. A. Poole.

The gage is a vertical board, graduated in feet and tenths, and is secured to retaining wall on south side of gates at entrance to feeder, about 55 feet above crest of dam. The elevation of zero of gage is 429.53, Barge canal datum. The elevation of bench mark on east end of north retaining wall of feeder, 42 feet east of gates, is 434.74. Observations are taken twice daily by Edward Strong.

The dam is of masonry and in good condition, having been rebuilt in 1897. It is of trapezoidal shape with an approach slope of 1 on 6 and vertical down-stream face. The length of crest is 99.1 feet at an average elevation of 431.18. The discharge over the dam has been calculated by means of the weir formula, using coefficients derived from the Cornell University experiments made in 1898.

The flow in the feeder is controlled by gateways at entrance. There are four openings in the bulkhead, which are regulated by means of drop planks. The rate of flow in the feeder is fairly constant, the amount of opening at entrance being regulated to keep the water-surface at a constant elevation.

Water is also diverted through the cement mill on east side of creek. Current-meter measurements have been made in the raceway to mill, to determine this diversion, and a record of the number of hours the mill is running is kept.

The flow of Limestone creek is regulated by storage in De Ruyter reservoir, which receives its supply mainly from the upper watershed of Tioughnioga creek, which has been diverted for additional supply to the Erie canal through Limestone creek. The drainage area thus diverted from Chenango river basin is 18.15 square miles, which, added to the natural watershed of Limestone creek, gives a drainage area above this station of 103 square miles.

A gage was temporarily maintained in the canal feeder at Fayetteville, but the fluctuation was so slight that it has been discontinued.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Limestone Creek above dam, at Fayetteville, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	......	......	......	......	......	431.6	431.0	431.4	432.3
2	......	......	......	......	......	......	......	......	431.6	431.0	431.4	432.3
3	......	......	......	......	......	......	......	......	431.8	431.1	431.4	432.3
4	......	......	......	......	......	......	......	......	431.9	431.1	431.4	432.3
5	......	......	......	......	......	......	......	......	431.9	431.0	431.3	432.3
6	......	......	......	......	......	......	......	......	431.5	431.0	431.3	432.2
7	......	......	......	......	......	......	......	......	431.5	431.0	431.3	432.2
8	......	......	......	......	......	......	......	......	431.5	431.5	431.3	432.1
9	......	......	......	......	......	......	......	......	431.5	432.0	431.3	432.1
10	......	......	......	......	......	......	......	......	431.5	432.0	431.3	431.9
11	......	......	......	......	......	......	......	......	431.5	431.5	431.3	431.9
12	......	......	......	......	......	......	......	......	431.5	431.5	431.3	431.9
13	......	......	......	......	......	......	......	......	431.5	431.5	431.3	431.9
14	......	......	......	......	......	......	......	......	431.5	431.5	431.3	431.9
15	......	......	......	......	......	......	......	......	431.5	431.5	431.3	431.9
16	......	......	......	......	......	......	......	......	431.1	431.4	431.3	431.9
17	......	......	......	......	......	......	......	......	431.0	431.4	431.3	432.1
18	......	......	......	......	......	......	......	......	431.0	431.5	431.3	432.1
19	......	......	......	......	......	......	......	......	431.0	431.5	431.3	432.1
20	......	......	......	......	......	......	......	......	431.3	431.5	431.3	432.1
21	......	......	......	......	......	......	......	......	431.5	431.5	431.3	432.2
22	......	......	......	......	......	......	......	......	431.4	431.5	431.3	432.3
23	......	......	......	......	......	......	......	......	431.3	431.3	431.3	432.3
24	......	......	......	......	......	......	......	......	431.1	431.2	431.3	432.0
25	......	......	......	......	......	......	......	......	431.1	431.2	431.3	432.0
26	......	......	......	......	......	......	......	......	431.1	431.2	431.3	432.0
27	......	......	......	......	......	......	......	431.2	431.0	431.2	431.3	432.0
28	......	......	......	......	......	......	......	431.0	431.0	431.2	431.3	432.0
29	......	......	......	......	......	......	......	431.0	431.0	431.5	431.9	432.0
30	......	......	......	......	......	......	......	432.0	431.0	431.5	431.9	432.0
31	......	......	......	......	......	......	......	432.2	......	431.5	......	432.0

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Limestone Creek above dam, at Fayetteville, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	432.0	432.0	432.0	432.1	430.9	431.1	431.7	431.3	430.3	430.9	431.1	431.5
2	432.0	432.0	432.0	432.1	430.9	430.5	431.7	431.3	430.3	430.9	431.1	432.0
3	432.0	432.0	432.0	432.2	431.3	431.1	431.5	431.4	430.3	430.9	431.1	432.0
4	432.0	432.0	432.2	432.2	431.3	431.1	431.5	431.5	430.3	430.9	431.2	432.1
5	432.0	432.0	432.1	432.1	431.3	431.0	431.5	431.3	430.4	430.9	431.1	432.1
6	432.0	432.0	432.0	432.1	431.1	431.0	431.3	431.3	430.5	431.1	431.2	432.1
7	432.0	432.0	432.0	432.2	431.2	431.0	431.3	431.2	430.4	430.7	431.1	432.0
8	432.0	432.0	432.0	432.2	431.3	431.4	431.3	431.3	430.3	431.3	431.2	432.0
9	432.1	432.0	432.0	432.2	431.3	431.8	431.3	431.1	430.3	431.3	431.3	432.1
10	432.0	432.0	432.0	432.3	431.3	431.5	431.5	431.1	430.3	431.3	431.3	432.1
11	432.0	432.0	432.0	432.2	431.3	431.5	431.5	431.2	430.2	431.2	431.3	432.1
12	432.0	432.0	432.0	432.1	431.2	431.3	431.3	431.3	430.2	431.2	431.3	432.0
13	432.0	432.0	432.0	432.1	431.3	431.3	431.3	431.3	430.4	431.2	431.3	432.0
14	432.0	432.0	432.0	432.1	431.3	431.2	431.3	431.2	430.4	431.3	431.5	432.1
15	432.0	432.0	432.0	432.0	431.2	431.1	431.5	431.1	430.5	431.3	431.5	432.1
16	432.0	432.0	432.0	432.0	431.1	431.0	431.4	431.0	430.5	431.3	432.0	429.8
17	432.0	432.0	432.0	431.3	431.1	431.8	431.4	431.1	430.8	431.3	432.3	429.8
18	432.0	432.0	432.0	431.3	431.1	431.7	431.3	431.1	430.9	431.5	431.5	429.8
19	432.0	432.0	432.0	431.5	431.1	431.5	431.3	431.6	431.1	431.7	431.5	429.9
20	432.0	432.0	432.0	431.6	431.1	431.5	431.3	431.4	431.1	431.7	431.3	429.9
21	432.0	432.0	432.0	431.6	430.9	431.5	431.3	431.3	431.1	431.3	431.3	429.9
22	432.0	432.0	432.0	431.6	430.9	431.5	431.3	431.3	431.1	431.3	431.3	429.9
23	432.0	432.0	432.0	431.6	431.0	431.5	431.2	431.2	431.1	431.3	431.3	429.8
24	432.0	432.0	432.0	431.6	430.9	431.5	431.2	431.0	431.2	431.3	431.3	429.8
25	432.0	432.0	432.0	431.5	430.9	431.5	431.1	431.0	431.2	431.5	431.7	429.8
26	432.0	432.0	432.0	431.3	430.9	431.5	431.0	431.3	431.2	431.7	431.7	429.8
27	432.0	432.0	432.1	431.3	431.9	431.3	431.0	431.2	431.2	431.5	431.5	429.9
28	432.0	432.0	432.2	431.0	431.8	431.3	431.0	431.1	431.2	431.3	431.5	429.9
29	432.0	......	432.3	430.9	431.5	431.3	431.3	431.1	431.2	431.3	431.5	429.9
30	432.0	......	432.1	431.0	431.5	431.3	431.3	430.7	430.9	431.2	431.5	429.8
31	432.0	......	432.1	......	431.3	......	431 3	430.5	......	431.2	......	429.8

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Limestone Creek at Fayetteville Feeder.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	......	......	......	......	......	429.2	429.1	429.1	......
2	......	......	......	......	......	......	......	......	429.4	429.1	429.1	......
3	......	......	......	......	......	......	......	......	429.4	429.1	429.1	......
4	......	......	......	......	......	......	......	......	429.4	429.1	429.1	......
5	......	......	......	......	......	......	......	......	429.1	429.1	429.2	......
6	......	......	......	......	......	......	......	......	429.2	429.1	429.2	......
7	......	......	......	......	......	......	......	......	429.3	429.1	429.2	......
8	......	......	......	......	......	......	......	......	429.4	429.1	429.2	......
9	......	......	......	......	......	......	......	......	429.4	428.8	429.2	......
10	......	......	......	......	......	......	......	......	429.4	428.5	429.2	......
11	......	......	......	......	......	......	......	......	429.4	429.2	429.2	......
12	......	......	......	......	......	......	......	......	429.2	429.2	429.2	......
13	......	......	......	......	......	......	......	......	429.3	429.2	429.2	......
14	......	......	......	......	......	......	......	......	429.3	429.3	429.2	......
15	......	......	......	......	......	......	......	......	429.3	429.3	429.2	......
16	......	......	......	......	......	......	......	......	429.5	429.3	429.2	......
17	......	......	......	......	......	......	......	......	429.5	429.3	429.2	......
18	......	......	......	......	......	......	......	......	429.4	429.2	429.2	......
19	......	......	......	......	......	......	......	......	429.4	429.1	429.2	......
20	......	......	......	......	......	......	......	......	429.4	429.1	429.2	......
21	......	......	......	......	......	......	......	......	429.2	428.9	429.2	......
22	......	......	......	......	......	......	......	......	429.2	428.9	429.1	......
23	......	......	......	......	......	......	......	......	429.2	428.9	429.1	......
24	......	......	......	......	......	......	......	......	429.1	429.1	429.1	......
25	......	......	......	......	......	......	......	......	429.1	429.1	429.1	......
26	......	......	......	......	......	......	......	......	429.1	429.1	429.2	......
27	......	......	......	......	......	......	......	429.2	429.1	429.1	429.2	......
28	......	......	......	......	......	......	......	429.1	429.1	429.1	429.2	......
29	......	......	......	......	......	......	......	429.2	429.1	429.1	......	......
30	......	......	......	......	......	......	......	429.4	429.1	429.1	......	......
31	......	......	......	......	......	......	......	429.4	......	429.1	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Fayetteville Feeder.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906												
1	......	......	......	......	429.07	429.17	429.27	429.17	428.87	429.17	429.17	429.3
2	......	......	......	......	429.12	429.17	429.27	429.17	428.87	429.17	429.17	428.4
3	......	......	......	......	429.17	428.97	429.17	429.27	428.87	429.17	429.17	428.4
4	......	......	......	......	429.17	429.07	429.17	429.27	428.87	429.17	429.17	428.6
5	......	......	......	......	429.27	429.07	429.17	429.37	428.97	429.17	429.17	428.6
6	......	......	......	......	428.97	429.07	429.07	429.27	429.07	429.27	429.27	428.8
7	......	......	......	......	429.07	429.07	429.07	429.17	428.87	428.87	429.27	429.1
8	......	......	......	......	429.17	429.42	428.87	429.37	428.77	429.07	429.27	429.1
9	......	......	......	......	429.17	429.77	429.12	429.27	428.87	428.87	429.37	428.9
10	......	......	......	......	429.17	429.42	429.07	429.37	428.87	429.37	429.37	428.9
11	......	......	......	......	429.07	429.27	429.07	429.37	428.87	429.27	429.17	428.9
12	......	......	......	......	429.07	429.32	429.07	429.37	428.97	429.27	429.17	428.9
13	......	......	......	......	428.97	429.42	429.07	429.37	428.97	429.27	429.17	428.9
14	......	......	......	......	428.97	429.47	429.07	429.27	428.97	429.07	429.27	429.1
15	......	......	......	......	429.07	429.47	429.37	429.17	429.07	429.07	429.37	429.1
16	......	......	......	......	429.07	429.42	429.40	429.17	429.07	429.07	429.37	429.2
17	......	......	......	......	429.07	429.37	429.47	429.17	429.07	429.07	429.47	429.2
18	......	......	......	......	429.07	429.37	429.47	429.17	429.07	429.37	429.37	429.2
19	......	......	......	......	429.12	429.17	429.37	429.27	429.07	429.37	429.37	428.9
20	......	......	......	......	429.07	429.17	429.37	429.27	429.17	429.37	429.17	428.4
21	......	......	......	......	429.07	429.07	429.37	429.17	429.17	429.17	429.17	428.4
22	......	......	......	......	429.07	429.07	429.77	429.17	429.17	429.17	429.17	428.4
23	......	......	......	......	429.17	429.07	429.67	429.17	429.17	429.17	429.17	428.4
24	......	......	......	......	429.17	429.37	429.67	429.17	429.22	429.17	429.17	428.4
25	......	......	......	......	429.17	429.37	429.47	429.17	429.27	429.27	429.17	428.4
26	......	......	......	......	429.22	429.17	429.37	429.27	429.27	429.37	429.17	428.4
27	......	......	......	......	429.47	429.27	429.37	429.27	429.27	429.37	429.17	428.4
28	......	......	......	......	429.27	429.37	429.37	429.17	429.27	429.22	429.17	428.4
29	......	......	......	428.9	429.27	429.37	429.17	429.12	429.27	429.27	429.27	428.4
30	......	......	......	429.0	429.22	429.37	429.17	428.87	429.17	429.27	429.27	......
31	......	......	......	......	429.17	......	429.17	428.87	......	429.17	......	......

Current Meter Discharge Measurements of Raceway, Limestone Creek at Fayetteville, N. Y.

DATE.	Hydrographer.	Gage height.	Width.	Area of section.	Mean velocity.	Discharge.
		Feet.	*Feet.*	*Square feet.*	*Feet per second.*	*Second-feet.*
1905.						
Dec. 27	....	....	15.4	42.	2.12	89
1906.						
April 18	C. A. Poole........	2.1	13.8	48.44	2.27	109*
April 24	C. A. Poole........	2.4	13.8	44.30	1.36	60†

Current Meter Discharge Measurements of Fayetteville Feeder at Fayetteville, N. Y.

DATE.	Hydrographer.	Gage height.	Width.	Area of section.	Mean velocity.	Discharge.
		Feet.	*Feet.*	*Square feet.*	*Feet per second.*	*Second-feet.*
1905.						
Aug. 25	C. A. Poole.......	7.4	50.5	251	0.23	58
Sept. 21	C. A. Poole.......	7.4	50.5	251	0.25	62

* 3 wheels running during measurement.
† 1 wheel running during measurement.

CHITTENANGO CREEK AT CHITTENANGO, MADISON COUNTY, N. Y.

A current-meter gaging station was established at Main street highway bridge in Chittenango village, May 22, 1901, by R. E. Horton, for the U. S. Geological Survey, by which it was maintained until July 9, 1905, when it was transferred to the care of this Department. Current-meter measurements have been taken and rating table made, from which the accompanying tables have been computed.

The stream at this point is entrained between parallel walls, affording a channel 50 feet wide, over which the bridge passes at a single span. The bridge stands at an angle to the thread of the stream, and has a span between abutments of 57 feet. The gage board is secured in a vertical position to the right abutment on the up-stream side, and reads decimally from 0 to 8 feet. The stage of the stream is observed twice daily by the gage-reader, Bessie M. Kellogg. The bench mark is on the up-stream corner of the coping of the right-hand bridge abutment.

Elevation, bench mark	458.39
Elevation, gage zero	450.16

The gaging station is one-half mile above the State dam, diverting water for the supply of the summit level of Erie canal. The flow of Chittenango creek, above Chittenango, is regulated by storage in Cazenovia lake and Erieville reservoir, the capacities of these reservoirs being:

	Cubic feet.
Cazenovia lake	206,997,000
Erieville reservoir	318,424,000

The drainage basin is deeply rolling, mostly cleared and has a heavy, impervious soil with extensive sodded-meadow areas. The soil is underlaid by shale rock, often outcropping, and affording numerous springs. The stream tributaries are somewhat sparse. Marsh and swamp areas are very limited, with the exception of the Nelson swamp, about two square miles in area.

Cazenovia lake is located at elevation, 1,190. From its outlet to the foot of the plateau at Erie canal crossing, the stream descends 770 feet, the distance, following the general trend of the valley, being 11 miles. The freshet of December 15, 1901, changed the cross-section of the stream at the gaging station. Separate rating curves have been prepared for the periods preceding and following that date.*

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Chittenango Creek at Chittenango, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	......	......	......	......	452.0	452.1	451.5	452.0	451.9
2	......	......	......	......	......	......	......	451.7	452.6	451.7	452.0	451.7
3	......	......	......	......	......	......	......	451.6	452.2	452.5	451.9	452.1
4	......	......	......	......	......	......	......	451.6	452.3	452.5	451.8	451.9
5	......	......	......	......	......	......	......	451.6	452.1	452.6	451.9	452.1
6	......	......	......	......	......	......	......	451.6	452.1	452.7	451.8	452.0
7	......	......	......	......	......	......	......	451.7	452.1	452.7	452.0	452.1
8	......	......	......	......	......	......	......	451.6	452.0	452.6	452.0	452.2
9	......	......	......	......	......	......	451.6	451.6	452.0	452.6	452.0	452.1
10	......	......	......	......	......	......	451.5	451.6	451.9	452.7	452.0	452.1
11	......	......	......	......	......	......	451.5	451.6	451.5	453.0	452.0	452.2
12	......	......	......	......	......	......	451.6	451.7	452.6	452.9	451.8	452.0
13	......	......	......	......	......	......	451.7	451.7	452.2	452.1	451.9	452.1
14	......	......	......	......	......	......	451.7	451.7	452.0	452.0	451.8	452.2
15	......	......	......	......	......	......	452.9	451.6	451.9	451.8	451.9	452.1
16	......	......	......	......	......	......	452.5	453.1	451.8	451.6	452.0	452.2
17	......	......	......	......	......	......	452.2	452.2	451.8	451.7	452.0	452.3
18	......	......	......	......	......	......	452.1	451.7	451.6	451.8	451.9	452.2
19	......	......	......	......	......	......	451.9	451.7	451.6	451.9	451.9	452.0
20	......	......	......	......	......	......	451.7	451.6	451.8	452.0	451.9	452.1
21	......	......	......	......	......	......	451.6	451.6	451.8	452.1	451.9	452.7
22	......	......	......	......	......	......	451.6	451.6	451.7	452.0	451.8	452.5
23	......	......	......	......	......	......	451.4	451.6	451.7	451.9	451.8	452.1
24	......	......	......	......	......	......	451.4	451.6	451.7	451.8	452.0	452.0
25	......	......	......	......	......	......	451.5	451.5	451.6	451.7	452.0	452.1
26	......	......	......	......	......	......	451.5	451.5	451.6	451.7	451.9	452.2
27	......	......	......	......	......	......	451.4	451.5	451.6	451.8	451.9	452.1
28	......	......	......	......	......	......	451.5	451.5	451.5	451.7	451.8	452.2
29	......	......	......	......	......	......	451.6	451.5	451.5	451.7	452.0	452.1
30	......	......	......	......	......	......	451.7	453.3	451.5	451.7	452.1	452.3
31	......	......	......	......	......	......	451.8	452.9	......	451.9	......	452.2

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* For results of gagings of Chittenango creek at Bridgeport just above the inflow to Oneida lake, see Report on Stream Gagings, contained in Supplement, Report of State Engineer and Surveyor of New York, 1902, pp. 52 to 57.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Chittenango Creek at Chittenango, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	452.2	451.9	451.6	452.2	452.0	452.0	452.3	451.6	451.1	451.7	451.7	451.6
2	452.1	451.7	451.7	452.1	452.6	451.9	452.1	451.7	451.2	451.7	451.7	451.7
3	452.1	451.6	452.5	452.2	452.4	451.8	452.0	451.7	451.3	451.6	451.6	451.7
4	452.5	451.7	452.7	452.4	452.4	451.6	452.1	451.6	451.2	451.7	451.7	451.8
5	452.4	451.6	452.2	452.7	452.5	451.5	451.9	451.5	451.3	451.6	451.7	451.7
6	452.3	451.5	451.9	452.6	452.3	451.4	451.8	451.6	451.3	451.8	451.7	452.7
7	452.1	451.6	451.7	452.5	452.1	451.6	451.7	451.7	451.3	451.8	451.7	452.0
8	452.2	451.5	451.7	452.3	451.9	451.7	451.7	451.7	451.3	451.7	451.7	451.9
9	452.1	451.6	451.6	452.5	451.9	452.1	451.6	451.5	451.3	451.7	451.7	451.7
10	452.1	451.6	451.7	453.1	451.9	451.9	451.7	451.6	451.4	451.8	451.8	451.8
11	452.2	451.5	451.8	453.0	452.0	451.5	451.6	451.5	451.4	451.7	451.9	451.8
12	452.2	451.6	451.7	452.6	452.0	451.9	451.7	451.6	451.3	451.7	451.9	451.8
13	452.1	451.5	451.6	452.4	452.1	451.8	451.6	451.6	451.1	451.6	451.9	451.7
14	452.1	451.6	451.7	452.6	452.3	451.7	451.6	451.6	451.2	451.7	451.8	451.9
15	452.1	451.6	451.6	453.1	452.0	451.7	451.5	451.4	451.4	451.8	451.8	452.4
16	452.2	451.5	451.5	452.8	451.8	452.0	451.4	451.4	451.4	451.7	451.7	452.6
17	452.1	451.6	451.6	452.5	451.8	452.3	451.6	451.4	451.4	451.8	451.8	451.9
18	452.2	451.6	451.6	452.4	451.7	452.9	451.5	451.4	451.5	451.9	452.6	451.7
19	452.1	451.4	451.7	452.4	452.2	453.0	451.4	451.4	451.4	451.7	452.4	451.5
20	452.2	451.5	451.6	452.3	452.0	452.7	451.4	451.5	451.5	451.8	451.9	451.3
21	452.5	452.3	451.5	452.2	451.8	452.4	451.4	451.7	451.8	451.8	451.8	451.2
22	452.7	452.5	451.6	452.0	451.6	452.2	451.3	451.7	451.9	451.7	451.8	452.0
23	452.9	452.0	451.7	451.9	451.6	452.7	451.4	451.6	451.8	451.8	451.8	452.0
24	452.7	452.0	451.6	451.9	451.4	452.6	451.4	451.4	451.7	451.9	451.6	451.8
25	452.3	452.3	451.7	451.8	451.5	452.4	451.4	451.4	451.6	452.0	451.4	451.7
26	452.1	452.2	452.1	451.9	451.6	452.2	451.4	451.4	451.7	452.1	451.7	451.7
27	452.2	451.9	453.9	451.8	453.2	452.1	451.3	451.1	451.8	451.9	451.9	451.6
28	452.0	451.7	453.3	451.7	453.0	452.3	451.4	451.2	451.7	452.0	451.7	451.6
29	451.9	......	452.4	451.8	452.8	452.2	451.5	451.0	451.8	452.1	451.5	451.7
30	452.1	......	453.3	451.7	452.6	452.3	451.4	451.1	451.8	451.9	451.5	452.1
31	452.0	......	452.8	......	451.3	......	451.4	451.1	......	451.7	......	452.2

Rating table for Chittenango Creek at Chittenango, N. Y., from January 1, 1905, to December 31, 1906.

Gage height.	Discharge.	Difference.	Gage height.	Discharge.	Difference.	Gage height.	Discharge.	Difference.	Gage height.	Discharge.	Difference.
1.00	30	5	1.90	135	20	2.80	440	45	3.70	910	60
1.10	35	5	2.00	155	25	2.90	485	45	3.80	970	65
1.20	40	10	2.10	180	30	3.00	530	50	3.90	1,035	65
1.30	50	10	2.20	210	30	3.10	580	50	4.00	1,100	70
1.40	60	10	2.30	240	35	3.20	630	50	4.10	1,170	70
1.50	70	15	2.40	275	40	3.30	680	55	4.20	1,240	
1.60	85	15	2.50	315	40	3.40	735	55			
1.70	100	15	2.60	355	40	3.50	790	60			
1.80	115	20	2.70	395	45	3.60	850	60			

Current Meter Discharge Measurements on Chittenango Creek at Chittenango, N. Y.

No.	DATE.	Hydrographer.	Meter number.	Width.	Area of section.	Gage height.	Discharge
	1906.			*Feet.*	*Square feet.*	*Feet.*	*Second-feet.*
29	April 16	E. F. Weeks.....	717	58	170	2.60	329
30	April 21	E. F. Weeks.....	717	57	132	2.11	201
31	Nov. 7	E. F. Weeks.....	....	......	101	1.52	75

Mean Daily Discharge, Second-feet, of Chittenango Creek at Chittenango, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	168	108	78	168	78	125	210	60	30	85	85	60
2	145	78	78	145	125	108	155	70	30	85	70	85
3	145	65	258	168	275	93	115	70	35	60	60	85
4	240	70	375	210	225	65	155	60	30	70	85	85
5	210	60	155	315	258	55	115	60	35	60	85	85
6	195	55	108	295	195	45	85	60	40	85	70	315
7	145	65	78	258	145	65	85	70	35	85	85	115
8	155	55	78	240	108	155	70	85	40	70	70	100
9	145	65	65	258	108	145	60	60	40	70	85	85
10	145	65	78	508	108	108	85	60	40	85	85	85
11	155	55	85	440	125	55	60	60	40	85	100	85
12	155	65	78	295	115	108	70	60	40	70	115	85
13	145	55	65	225	145	93	60	60	30	60	100	85
14	135	65	70	275	195	78	60	60	30	85	85	115
15	135	65	60	463	125	78	60	40	40	85	85	630
16	155	55	55	375	93	115	40	40	40	85	85	275
17	145	65	60	258	85	180	60	40	40	85	85	115
18	168	65	65	225	78	418	60	40	50	115	275	85
19	145	45	70	210	168	440	40	40	40	85	210	60
20	168	50	60	180	125	315	40	60	50	85	115	40
21	240	180	55	145	93	210	40	85	85	85	85	30
22	335	240	65	125	65	168	40	70	100	85	85	115
23	395	125	70	108	65	315	40	60	85	85	85	115
24	335	125	65	100	45	295	40	40	70	115	60	85
25	180	180	78	85	55	225	40	40	60	135	40	85
26	145	155	135	100	65	168	40	40	70	155	70	70
27	168	108	910	85	555	145	40	30	85	115	115	60
28	125	78	605	78	463	195	40	30	70	115	85	60
29	108	......	225	85	375	168	50	20	85	155	60	70
30	145	......	605	93	295	195	40	30	85	115	60	......
31	125	......	418	......	195	......	40	30	......	85	......	......
Mean	177	88	169	217	166	164	69	53	52	92	93	116

Monthly Discharge of Chittenango Creek at Chittenango, N. Y.
[Drainage area, 79 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1906.					
January	395	108	177	2.24	2.58
February	240	45	88	1.11	1.15
March	910	55	169	2.14	2.47
April	508	78	217	2.76	3.08
May	555	45	166	2.10	2.42
June	440	45	164	2.08	2.32
July	210	40	69	0.875	1.01
August	85	20	53	0.672	.772
September	100	30	52	0.659	.729
October	155	60	92	1.16	1.37
November	275	40	93	1.18	1.32
December	630	30	116	1.47	1.68
The year	375	50	121	1.53	1.74

LAKE ERIE DRAINAGE

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Erie Canal near Change Bridge, Pendleton, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	571.1	571.4	570.9	573.0	571.2	571.4	571.5	570.9	570.8	570.9	571.9	571.8
2	571.1	571.0	570.4	571.9	571.2	571.4	571.4	570.8	571.1	571.0	572.0	571.8
3	570.9	571.2	570.9	571.4	571.3	571.5	571.2	570.9	571.3	571.2	571.9	570.0
4	571.7	571.2	571.6	571.1	571.4	571.3	571.5	570.9	571.0	571.2	571.8	569.9
5	571.8	570.8	571.3	571.8	571.5	571.2	571.2	571.2	570.7	571.3	571.8	570.0
6	571.8	570.6	571.2	571.9	571.9	571.2	571.3	571.3	571.0	571.5	571.8	571.8
7	571.3	570.6	571.0	571.5	571.8	571.2	571.6	571.2	571.0	571.1	571.5	572.0
8	571.0	570.7	571.1	571.8	571.6	571.3	571.7	571.0	571.1	571.0	571.5	572.0
9	571.0	570.7	571.1	571.8	571.6	571.3	571.5	570.8	571.5	571.5	571.2	572.3
10	571.1	570.9	571.1	574.0	571.6	571.5	571.4	571.0	571.4	571.5	571.1	572.4
11	571.0	570.9	571.1	573.4	571.5	571.2	571.1	571.1	571.4	571.8	571.0	572.0
12	570.9	570.8	571.0	572.7	571.6	571.0	571.1	571.0	571.3	571.9	571.2	571.5
13	570.6	570.9	571.0	572.1	571.7	571.0	571.1	570.9	571.4	571.8	571.2	571.1
14	571.2	570.8	570.9	571.9	571.7	570.9	571.0	571.0	570.9	571.8	571.9	571.2
15	570.9	571.0	570.8	571.7	572.1	571.0	571.3	570.9	570.7	571.5	571.8	572.4
16	571.5	571.0	571.1	571.9	571.7	571.1	571.3	570.8	571.0	571.3	571.8	574.4
17	571.3	571.0	571.1	572.0	571.7	571.3	571.3	750.8	571.2	571.2	571.6	574.0
18	571.2	571.2	571.0	571.9	571.9	571.3	571.1	570.8	571.0	571.2	572.1	572.5
19	571.2	571.0	570.5	571.8	571.8	571.5	571.1	571.1	571.0	571.8	572.4	571.2
20	571.6	571.0	570.8	571.5	571.6	571.6	571.1	571.0	571.0	571.8	571.9	571.1
21	573.2	571.3	570.8	570.8	571.4	571.5	571.3	571.0	571.2	571.6	571.9	571.0
22	572.5	571.6	570.7	570.7	571.5	571.4	571.4	571.0	571.4	571.7	572.9	570.8
23	573.0	571.6	570.5	571.1	571.4	571.5	571.4	571.1	571.5	571.6	572.3	571.0
24	571.8	571.6	570.4	569.8	571.5	571.6	571.1	570.7	570.9	571.3	571.8	570.9
25	571.4	571.5	570.7	570.0	571.5	571.4	571.0	571.0	571.0	572.2	571.9	571.1
26	571.5	571.3	570.8	570.0	571.5	571.3	570.8	571.5	571.0	571.9	571.6	570.8
27	571.3	571.3	573.4	570.5	571.2	571.2	571.0	571.3	571.2	572.0	571.7	570.9
28	571.4	571.4	574.8	570.8	571.2	571.3	571.0	571.3	570.9	572.0	571.0	570.7
29	571.2	......	574.4	570.7	571.2	571.5	571.2	571.3	571.1	571.6	571.9	570.8
30	571.3	......	573.8	570.8	571.5	571.5	571.2	571.2	570.9	571.4	571.7	571.0
31	571.3	......	572.7	......	571.4	......	571.1	571.1	......	571.6	......	573.0

Current Meter Discharge Measurements of Erie Canal near Change Bridge, Pendleton, N. Y.

DATE.	Gage height.	Elevation of water-surface.	Width.	Area of section.	Mean velocity.	Discharge.
1905.	*Feet.*	*Feet.*	*Feet.*	*Square Feet.*	*Feet per second.*	*Second-feet.*
October 4	10.9	570.9	80.3	636	1.43	910
October 24	10.9	570.9	80.3	636	1.52	969

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Erie Canal near Main Street Bridge, Tonawanda, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	......	571.7	571.0	......	571.4	571.65	......	571.3	571.3	571.2	572.1	571.4
2	571.2	571.2	570.6	571.5	571.3	571.65	571.7	571.3	......	571.4	572.2	......
3	571.1	571.3	571.0	571.3	571.5	......	571.7	571.4	571.0	571.5	572.1	570.0
4	571.8	......	......	571.0	571.45	571.6	571.65	571.4	571.2	571.5	......	570.0
5	571.8	571.0	571.2	571.6	571.7	571.5	571.5	......	571.2	571.6	572.0	570.8
6	571.8	570.8	571.2	571.5	......	571.45	571.6	571.45	571.4	571.7	571.9	571.5
7	......	570.9	571.2	571.4	571.9	571.45	571.7	571.4	571.5	......	571.8	571.7
8	571.1	570.9	571.0	......	571.8	571.45	......	571.3	571.5	571.4	571.7	571.8
9	571.1	571.0	571.2	571.4	571.8	571.5	571.7	571.3	......	571.8	571.5	......
10	571.3	571.0	571.3	572.5	571.75	......	571.75	571.3	571.6	571.7	571.5	571.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Erie Canal near Main Street Bridge, Tonawanda, N. Y.—Co [illegible]

DAY.	Jan.	Feb.	March.	April.	May.	June.	Ju	[illegible]	[illegible]	Oct.	Nov.	Dec.
1906.												
11	571.0	......	[illegible]	[illegible]	571.65	571.55	571	[illegible]	[illegible]	571.	[illegible]	[illegible]
12	571.1	571.0	[illegible]	[illegible]	71.6	571.25	571	[illegible]	[illegible]	571.	[illegible]	[illegible]
13	570.7	571.0	[illegible]	[illegible]	......	571.2	571	[illegible]	[illegible]	571.	[illegible]	[illegible]
14	......	571.0	[illegible]	[illegible]	1.9	571.3	571.	[illegible]	[illegible]	...	[illegible]	[illegible]
15	571.1	571.1	[illegible]	[illegible]	.2	571.3	....	[illegible]	[illegible]	71.	[illegible]	[illegible]
16	571.6	571.2	[illegible]	[illegible]	.75	571.35	571.6	[illegible]	[illegible]	71.	[illegible]	[illegible]
17	571.5	571.1	[illegible]	[illegible]	8	......	571.5	[illegible]	[illegible]	71.	[illegible]	[illegible]
18	571.4	......	[illegible]	[illegible]	05	571.6	571.4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	571.4	571.1	[illegible]	[illegible]	[illegible]	571.7	571.4	[illegible]	[illegible]	.9	[illegible]	[illegible]
20	571.5	571.1	[illegible]	[illegible]	[illegible]	571.9	571.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	......	571.3	[illegible]	[illegible]	[illegible]	571.8	571.4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	572.2	......	5	[illegible]	[illegible]	571.7	......	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	571.9	571.7	57	[illegible]	[illegible]	71.7	571.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	571.7	571.4	570	[illegible]	[illegible]	....	571.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	571.6	......	...	[illegible]	[illegible]	.7	571.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	571.6	571.3	571	[illegible]	[illegible]	6	571.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	571.4	571.3	572	[illegible]	[illegible]	5	571.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28	......	571.5	572	[illegible]	[illegible]	[illegible]	571.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
29	571.2	......	572.	[illegible]	[illegible]	[illegible]	......	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
30	571.4	......	572.	[illegible]	[illegible]	[illegible]	71.5	5	[illegible]	[illegible]	[illegible]	[illegible]
31	571.3	......	571.	[illegible]	[illegible]	[illegible]	71.4	5	[illegible]	[illegible]	[illegible]	[illegible]

Mean Daily Elevation of Water-sur [illegible] *Datu* [illegible]
at N. Y. C. & H. [illegible]

DAY.	Jan.	Feb.	March.	April.	[illegible]
1906.					
1	[illegible]	567.2	566.4	......	566
2	[illegible]	68.9	566.2	565.6	567
3	[illegible]	7	566.6	566.4	566.
4	[illegible]	[illegible]	......	566.8	567
5	[illegible]	[illegible]	66.4	566.6	566.
6	[illegible]	[illegible]	6	566.8	....
7	[illegible]	[illegible]	7	566.6	566.
8	[illegible]	[illegible]	[illegible]	....	566.7
9	[illegible]	[illegible]	[illegible]	.5	567.
10	[illegible]	[illegible]	[illegible]	.9	567.
11	[illegible]	[illegible]	[illegible]	[illegible]	567.1
12	[illegible]	[illegible]	[illegible]	[illegible]	567.
13	[illegible]	[illegible]	[illegible]	[illegible]	....
14	...	[illegible]	[illegible]	[illegible]	66.3
15	56	[illegible]	[illegible]	[illegible]	[illegible]
16	569.	[illegible]	[illegible]	[illegible]	[illegible]
17	567.	[illegible]	[illegible]	[illegible]	[illegible]
18	567.3	[illegible]	[illegible]	[illegible]	[illegible]
19	566.7	5	[illegible]	[illegible]	[illegible]
20	566.8	56	[illegible]	[illegible]	[illegible]
21	......	566.	[illegible]	[illegible]	[illegible]
22	566.8	......	[illegible]	[illegible]	[illegible]
23	568.5	566.5	[illegible]	[illegible]	[illegible]
24	567.0	566.4	[illegible]	[illegible]	[illegible]
25	566.6	......	...	[illegible]	[illegible]
26	566.6	566.7	56	[illegible]	[illegible]
27	566.8	566.4	567	[illegible]	[illegible]
28	......	566.7	566.	[illegible]	[illegible]
29	566.7	......	566.3	[illegible]	[illegible]
30	567.0	......	566.3	[illegible]	[illegible]
31	567.0	......	565.8	...	[illegible]

HUDSON RIVER DRAINAGE BASIN.

DESCRIPTION OF BASIN.

The principal sources of Hudson river lie in the wildest portion of the Adirondack mountains, in Essex county, northeastern New York. A number of branches, any one of which might possibly be considered the main stream, form its upper waters; but if the highest collected and permanent body of water be assumed as the true head, then the source of the Hudson becomes Lake Tear-of-the-Clouds, which lies at an elevation of 4,322 feet above tide, in the center of the triangle formed by Mounts Marcy and Skylight and Gray Peak.

The river flows rather irregularly southward until it reaches the
rthern boundary of Saratoga county, when it makes a sharp
n and flows eastward for about 12 miles by general course,
ing through the mountains and forming, as it cuts across the
strata, several notable waterfalls. At Sandy Hill, just
Glens Falls, it makes another abrupt turn and flows south-
ontinuing in this direction until it empties into New York

Lake Tear-of-the-Clouds to the mouth of the river the
water is probably about 300 miles. The total area
3,366 square miles. The river is tidal to Troy, which
head of navigation.

ter region is mountainous in character, in general
and dotted with numerous lakes and ponds. The
the oldest formation and mainly granitic, are
red with only a layer of spruce duff, humus
he river emerges from the mountain region
ns Falls, and thence to Troy the topography
d the surface soil is chiefly sand. Below
great depression which extends almost
n New York bay and the St. Law-
bordered by well-cultivated lands,
from the stream. The Catskill
30 miles below Albany, and

thence to the mouth of the river the immediate valley is flanked by high hills, the Highlands of Orange county and the precipitous Palisades being especially noticeable.

The fall in the upper portion of the course is very rapid, amounting to about 64 feet per mile from Lake Tear-of-the-Clouds to North creek, a distance of about 52 miles. From the mouth of North creek to the mouth of the Sacandaga the descent is nearly 14 feet per mile, distributed among rapids which diminish in frequency as the Sacandaga is approached. In the succeeding 26 miles to Fort Edward the river descends 418 feet more, but of this 175 feet is comprised within the three abrupt pitches at Palmer, Glens and Bakers falls, while most of the remainder occurs in the rapids between Jessups Landing and the oxbow above Glens Falls. Between Glens Falls and Troy nearly the entire fall of the river is utilized for the development of water-power.

The tributaries of the Hudson are numerous, and many of them are large and important. Indian river, Schroon river, and Sacandaga unite with the main stream above Glens Falls, and between the latter point and Troy Hudson river receives Batten kill, Fish creek, Hoosic river and the Mohawk. The tributaries below Troy include Catskill, Esopus and Rondout creeks and Wallkill river from the west, and Kinderhook creek, Jansen kill, Wappinger creek, Fishkill creek and Croton river from the east.

Mohawk river, the largest of the tributary streams, rises in the sandy hills south of Boonville, in western New York, about 40 miles from the east end of Lake Ontario. Its uppermost tributaries are fed by large springs, and in addition the stream receives considerable water brought in from the adjacent Black river drainage basin for the supply of the Black River and Erie canals.

The Mohawk flows southward until it reaches the city of Rome, at which point it turns to the east, flowing across the state in a course a little south of east until it enters the Hudson at Cohoes, a few miles above Troy. It has a length by actual course of 140 to 145 miles, and a drainage area, measured at the mouth, of 3,468 square miles.

The immediate valley of the Mohawk is broad and open, at many places a mile or two in width, from which there is a rise, usually gradual but sometimes abrupt, to hills which attain altitudes several hundred feet above the stream. Toward the mouth of the river the valley becomes more contracted and the meadows disappear. The flats which border the stream have a rich alluvial soil; the more elevated lands are covered with gravelly loam and clay.

Above Rome the Mohawk flows through a deep gorge in shale rock; from Rome eastward to Little Falls the valley is deeply filled with alluvial deposits, and the flood plains on either side become submerged during freshets, thus acting to some extent as storage reservoirs. At Little Falls the river cuts through a rocky gorge, whose walls rise precipitously 500 or 600 feet.

Below Rome the fall of the river is small and rather uniform, being made up of long quiet reaches with slight riffles; but at Little Falls this uniformity is broken, and the stream descends in a succession of falls about 45 feet in 2,500. The average fall between Rome and the lower aqueduct at Crescent, a distance of 110.7 miles, is 2.43 feet per mile; thence to the level of slack water above Troy dam there is a farther descent of 149.5 feet in 4.4 miles, but of this 105 feet is included within the improved power at Cohoes.

The principal tributaries of the Mohawk below the source are, successively, Oriskany, West Canada, East Canada and Schoharie creeks.

The Erie canal runs parallel to the Mohawk through most of its course below Rome and derives a part of its water-supply from the river. Feeder dams for purposes of diversion are located on the river at Delta, Rome, Little Falls, Rocky Rift and Rexford Flats. A dam at Oriskany creek also diverts into the canal a portion of the flow of that tributary, as well as waters brought into the Mohawk basin from storage reservoirs located in the upper drainage basin of Chenango river near Hamilton, N. Y. There is also a diversion dam near the mouth of Schoharie creek, the largest tributary of the Mohawk.

the elevation of which is referred to a circle near the outer corner on the up-stream side of the bridge seat on the right-hand abutment. The elevation of the bench mark is 21.29 feet above gage datum.

The erection of a dam a short distance below the gage for purposes of boating necessitated withholding a portion of the record for 1904. This dam was removed in the spring of 1905, and the discharge for 1906 has been calculated from the rating table as formerly used.

Daily Gage Height, in Feet, of Catskill Creek at South Cairo, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	3.12	3.05	4.61	4.46	3.15	3.84	4.6	2.2	2.1	2.02	2.42	3.2
2	3.05	3.05	4.29	4.21	3.0	3.49	3.7	2.12	2.12	1.95	2.18	3.1
3	3.25	2.9	4.12	4.16	3.55	3.32	4.6	2.1	2.0	1.95	2.1	3.1
4	3.4	3.0	8.52	4.21	3.45	3.19	4.2	2.1	2.05	1.95	2.2	3.2
5	3.5	3.0	5.37	5.58	3.25	3.12	3.4	2.1	1.9	2.25	2.32	3.18
6	3.15	2.98	3.97	5.98	3.15	3.14	2.78	2.18	2.08	2.25	2.3	3.3
7	3.22	2.8	3.67	4.86	3.15	3.27	2.85	2.2	2.02	2.15	2.25	4.75
8	3.3	2.7	3.62	4.46	3.04	3.12	2.6	2.2	2.05	2.0	2.35	4.08
9	3.31	2.7	3.92	4.71	2.95	2.98	2.72	2.55	2.05	2.0	2.35	4.0
10	3.0	2.7	4.07	6.16	3.15	3.15	2.7	2.45	1.98	2.02	2.35	4.05
11	3.0	2.8	3.57	7.34	3.05	3.3	2.72	2.22	1.95	2.05	2.35	4.05
12	2.9	2.8	3.52	6.41	2.95	3.0	2.55	2.05	2.4	2.05	2.35	3.35
13	3.25	2.8	3.32	5.66	2.85	3.65	2.45	2.3	1.9	2.02	2.5	2.85
14	2.95	2.75	3.07	5.74	2.75	2.6	2.4	2.2	2.0	2.05	2.4	2.85
15	2.82	2.8	3.27	7.91	2.75	2.57	2.52	2.1	1.95	2.05	2.45	3.4
16	2.85	2.8	3.27	6.36	2.67	2.55	2.2	2.1	2.0	1.98	2.4	3.85
17	3.25	2.78	3.07	5.31	2.6	3.88	2.45	2.1	2.0	1.95	2.48	3.5
18	3.2	2.8	2.87	4.86	2.63	4.05	2.6	2.1	1.95	2.02	2.75	3.18
19	2.95	2.78	2.95	4.58	2.7	3.7	2.42	2.0	1.95	2.05	5.45	2.95
20	2.9	2.75	3.67	4.51	2.6	3.52	2.25	1.95	1.95	2.32	4.8	3.05
21	2.88	2.88	3.17	4.14	2.45	3.2	2.32	2.1	1.95	2.8	4.55	3.2
22	3.75	5 1	3.02	3.98	2.64	3.25	2.1	1.9	2.05	2.55	4.55	3.5
23	4.2	4.2	2.97	3.81	2.37	2.95	2.22	2.25	2.0	2.52	4.18	3.4
24	5.15	4.07	2.89	3.68	2.39	2.95	2.3	2.2	2.05	2.35	3.75	3.0
25	4.0	4.12	2.82	3.5	2.54	2.85	2.18	2.1	2.05	2.65	3.4	3.2
26	3.6	4.92	6.11	3.35	2.56	2.72	2.12	2.2	2.0	2.55	3.42	3.2
27	3.42	4.02	8.91	3.27	4.19	2.35	2.15	2.25	2.0	2.48	3.4	3.1
28	3.32	3.97	9.21	3.17	7.54	2.38	2.0	2.08	1.95	2.45	3.5	2.7
29	3.3	......	6.34	3.05	6.49	2.45	2.0	2.35	2.05	2.45	3.42	2.8
30	3.18	......	4.86	3.05	4.79	2.4	2.1	2.1	1.98	2.45	3.18	2.8
31	3.1	......	5.61	......	4.34	......	2.18	2.1	......	2.42	......	3.15

Creek frozen over from January 2 to February 22; ice ranging from 0.2 foot to 0.8 foot in thickness. Creek broke up for second time March 4. Readings taken to water-surface through hole in ice for this period.

During frozen period for December regular readings to top of ice with the following extra readings:

DATE.	Water-surface.	Top of ice.	Thickness of ice at gage.
	Feet.	*Feet.*	*Feet.*
December 19	2.25	2.95	.58
December 22	2.9	3.5	.50
December 26	2.3	3.2	.75
December 29	2.7	3.1	.67

Discharge Measurements of Catskill Creek at South Cairo, N. Y.

DATE.	Hydrographer.	Width.	Area of section.	Gage height.	Discharge.
1906.		*Feet.*	*Square feet.*	*Feet.*	*Second-feet.*
Feb.* 16	Horton and Mott	100	190	2.82	62
June 7	C. C. Covert	160	347	3.35	267
Aug. 24	C. C. Covert	58	47	2.25	†36
Sept. 9	C. C. Covert	20	14	2.10	‡15.4
Sept. 9	C. C. Covert	20	13	2.09	§13.9

* Measurement made under ice cover; average thickness of ice, 0.70 foot. Gage height to bottom of ice, 2.22. † Made by wading 1,000 feet above bridge. ‡ Made by wading. § Made by wading one-quarter mile below bridge.

ESOPUS CREEK AT KINGSTON, N. Y.

Esopus creek has its source in northwestern Ulster county and enters Hudson river near Saugerties. Between Olivebridge and Kingston it passes successively over the shales of the Ithaca and Hamilton series. The course of the upper portion of the stream is southeastward; at Binnewater it encounters the Onondaga limestone barrier and turns abruptly to the northeast, following the western margin of this formation closely to Glen Erie, where it breaks over the Onondaga and the sandstones of the Oriskany and Helderberg series, forming precipitous falls. Finally at Saugerties it cuts through the easily eroded Hudson river shales, making its descent to tide-water level of the Hudson in an abrupt fall of about 40 feet.

In general the notable falls in the stream occur at the transition from one geologic formation to another, as follows:

Falls in Esopus Creek.

LOCATION.	FORMATION.		Approximate fall.
	From—	To—	
			Feet.
Olivebridge	Catskill	Ithaca	28
Glen Erie	Onondaga	Oriskany	56
Saugerties	Helderberg	Hudson river	40

Between Binnewater and Saugerties, a distance of about 20 miles, the course of the creek lies parallel to that of Hudson river, although the two streams flow in opposite directions. At Kingston the creek is 2.5 miles from the Hudson and at an elevation of 140 feet above tide.

A gaging station was established July 5, 1901, by Robert E. Horton, at the Washington street bridge over Esopus creek at Kingston. This station is maintained by the U. S. Geological Survey in co-operation with this Department.

The channel is straight at the point of gaging, but curves a short distance above and below. The right bank is subject to overflow during high water, but at ordinary and low stages the flow is all confined in one channel.

A standard chain gage is attached to the bridge; length of chain, 31.04 feet. The gage is read twice each day by John Douglas. The bench mark is a cut on the up-stream corner of the right-hand abutment; elevation, 31.73 feet above the datum of the gage.

In winter and at times when the stream was more or less obstructed by ice special discharge measurements have been made, from which a rating curve, applicable to periods when the stream is frozen, has been derived. This gives a discharge considerably smaller at a given stage of the stream than is indicated by a regular rating curve for the cross-section derived from measurements in open section.

Daily Gage Height, in Feet, of Esopus Creek at Kingston, N. Y.

DAY	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	6.4	6.12	6.5	8.32	6.24	7.18	5.58	4.75	4.25	4.25	5.72	5.6
2	6.12	6.05	6.47	7.99	6.11	6.82	5.65	4.52	4.04	4.08	5.52	5.5
3	5.92	5.89	6.23	7.42	6.28	6.6	5.75	4.48	4.04	4.05	5.32	5.42
4	7.05	5.42	14.55	7.28	6.2	6.16	7.25	5.05	4.28	3.98	5.18	5.25
5	7.52	5.99	9.65	7.75	6.2	5.98	5.94	5.12	4.12	3.98	5.18	5.12
6	6.9	5.59	8.27	8.63	6.04	6.1	5.66	5.7	4.12	3.98	5.05	5.62
7	6.47	5.75	7.8	8.25	6.04	5.92	5.42	5.18	4.12	3.98	4.98	6.88
8	7.2	5.75	7.39	7.85	6.0	5.68	5.12	5.5	4.02	3.88	4.88	5.84
9	7.36	5.67	7.21	7.61	6.22	5.58	5.04	5.21	3.94	4.12	4.62	5.62
10	6.55	5.62	7.0	9.33	6.69	6.1	5.35	4.75	3.78	4.02	4.85	5.92
11	6.42	5.59	6.55	11.48	6.49	5.88	5.28	4.78	4.02	4.08	4.92	6.12
12	6.72	5.56	6.57	10.67	6.27	5.68	5.05	4.75	3.92	4.08	5.88	6.0
13	7.05	5.6	6.13	9.92	6.16	5.52	4.88	4.58	3.92	4.0	5.55	5.7
14	6.42	5.6	6.17	9.55	6.11	5.34	4.8	4.48	3.98	3.92	5.3	5.68
15	6.11	5.55	6.65	16.01	5.91	5.28	4.68	4.4	3.95	3.85	5.15	5.62

Daily Gage Height, in Feet, of Esopus Creek at Kingston, N. Y.—Concluded.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
16	6.21	5.36	7.41	13.75	5.86	5.92	4.62	4.38	3.94	3.86	5.2	6.53
17	6.2	5.56	6.73	11.21	5.76	7.5	4.66	4.25	3.82	3.8	5.08	6.0
18	6.1	5.22	5.97	9.85	5.65	7.42	4.84	4.22	3.95	3.75	5.08	5.99
19	5.88	5.38	6.16	9.33	5.63	8.92	4.7	4.2	3.95	3.72	7.92	5.6
20	5.7	5.41	6.46	8.93	5.51	8.85	4.52	4.15	3.95	6.88	8.02	5.35
21	5.6	5.58	6.14	8.45	5.46	7.88	4.72	4.68	4.05	7.0	7.62	6.92
22	5.85	9.21	5.54	8.05	5.36	8.52	4.75	4.98	4.32	6.25	7.6	6.52
23	7.08	7.94	5.49	7.92	5.25	7.92	4.6	4.6	5.08	5.82	7.25	5.9
24	9.55	7.36	5.44	7.8	5.23	7.59	4.68	4.55	4.52	5.6	6.68	5.35
25	8.66	7.26	5.32	7.32	5.66	7.1	4.44	4.38	4.35	8.06	6.52	5.1
26	7.92	8.21	5.29	7.04	5.39	6.61	4.44	4.55	4.18	8.45	6.38	5.58
27	7.47	7.41	5.79	6.8	5.33	6.25	4.38	4.2	4.1	7.32	6.18	5.66
28	7.07	6.84	9.09	6.62	9.25	6.05	4.28	4.62	4.0	6.72	5.95	5.69
29	6.77	......	8.36	6.34	9.3	5.85	4.28	4.38	4.05	6.4	5.78	5.6
30	6.55	......	8.29	6.3	9.38	5.6	4.36	4.32	4.15	6.08	5.7	5.75
31	6.45	......	9.04	......	7.74	......	4.8	4.22	......	5.82	......	8.42

Ice conditions January 8–19, February 3 to March 3, and March 16–26; ice thickness ranged from 0.1 to 0.5 foot; slight ice gorging effect at times.

Ice conditions from December 9 to 31; no ice at gage; ice thickness ranged from 0.10 to 0.70 foot above and below bridge; ice broke up December 31, 1906.

During the frozen period the readings were to the surface of the water through a hole cut in the ice.

Current Meter Discharge Measurement of Esopus Creek at Kingston, N. Y.

DATE.	Hydrographer.	Width.	Area of section.	Gage height.	Discharge.
1906.		*Feet.*	*Square feet.*	*Feet.*	*Second-feet.*
Feb.* 15	Horton and Mott........	90	287	5.60	250
Aug. 23	C. C. Covert............	87	224	4.50	151

* Measurement made under ice cover; average thickness of ice, 0.33 foot; gage height to bottom of ice, 5.17 feet.

Rating table for Esopus Creek at Kingston, N. Y., from July 5, 1901, to December 31, 1906

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
Feet.	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*
3.50	8	4.70	200	5.90	498	8.00	1,373
3.60	22	4.80	220	6.00	527	8.50	1,640
3.70	36	4.90	240	6.20	596	9.00	1,940
3.80	49	5.00	260	6.40	665	9.50	2,275
3.90	63	5.10	285	6.60	741	10.00	2,642
4.00	77	5.20	309	6.80	823	10.50	3,030
4.10	94	5.30	334	7.00	905	11.00	3,440
4.20	110	5.40	358	7.20	995	12.00	4,340
4.30	127	5.50	383	7.40	1,085	13.00	5,305
4.40	143	5.60	412	7.60	1,179	14.00	6,280
4.50	160	5.70	441	7.80	1,276	15.00	7,310
4.60	180	5.80	469	....	....	16.00	8,390

The above table is applicable only for open-channel conditions. It is based on discharge measurements made during 1901–6. It is well defined between gage heights 3.8 feet and 11 feet. The table has been extended beyond these limits, being based on two measurements above 11 feet.

Rating table for Esopus Creek (Ice conditions) at Kingston, N. Y., for 1906.

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge
Feet.	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*
5.00	....	6.10	436	7.20	787	8.30	1,297
5.10	217	6.20	463	7.30	828	8.40	1,348
5.20	237	6.30	489	7.40	868	8.50	1,400
5.30	257	6.40	516	7.50	908	8.60	1,456
5.40	277	6.50	542	7.60	955	8.70	1,512
5.50	297	6.60	575	7.70	1,002	8.80	1,568
5.60	320	6.70	608	7.80	1,048	8.90	1,624
5.70	342	6.80	641	7.90	1,095	9.00	1,680
5.80	365	6.90	674	8.00	1,142		
5.90	387	7.00	707	8.10	1,193		
6.00	410	7.10	747	8.20	1,245		

Mean Daily Discharge, Second-feet, of Esopus Creek at Kingston, N Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	665	569	*542	1,540	610	986	406	210	118	118	447	412
2	569	544	*534	1,370	565	831	426	164	84	91	389	383
3	504	*385	*471	1,090	624	741	455	157	84	85	339	363
4	928	*281	6,840	1,030	596	582	1,020	272	124	74	304	322
5	1,140	*408	2,380	1,250	596	521	510	290	97	74	304	290
6	864	*318	1,520	1,720	541	562	429	441	97	74	272	418
7	690	*353	1,280	1,510	541	504	363	304	97	74	256	856
8	*787	*353	1,080	1,300	527	435	290	383	80	60	236	481
9	*852	*325	1,000	1,180	603	406	270	312	69	97	184	418
10	*558	*324	905	2,160	778	562	346	210	46	80	230	*392
11	*521	*318	720	3,870	696	492	329	216	80	91	244	*441
12	*615	*311	729	3,170	620	435	272	210	66	91	492	*410
13	*727	*320	572	2,580	582	389	236	176	66	77	397	*342
14	*521	*320	586	2,310	565	344	220	157	74	66	334	*338
15	*439	*308	762	8,410	501	329	196	143	70	56	297	*324
16	*466	*269	*872	6,040	486	504	184	140	69	57	309	*552
17	*463	*311	*618	3,630	458	1,130	192	118	52	49	280	*410
18	*436	*241	*403	2,530	426	1,090	228	113	70	42	280	*408
19	*383	*273	*452	2,160	421	1,890	200	110	70	39	1,330	*320
20	441	*279	*531	1,900	386	1,850	164	102	70	856	1,380	*267
21	412	*316	*447	1,610	373	1,310	204	196	85	905	1,190	*681
22	484	*1,800	*306	1,400	348	1,650	210	256	130	614	1,180	*549
23	941	*1,110	*295	1,330	322	1,330	180	180	280	475	1,020	*387
24	2,310	*852	*285	1,280	316	1,170	196	170	164	412	774	*267
25	1,740	*811	*261	1,050	429	950	150	140	135	1,400	708	*217
26	1,330	*1,250	*255	923	356	745	150	170	107	1,610	658	*315
27	1,120	*872	466	823	341	614	140	110	94	1,050	589	*333
28	936	*654	2,000	749	2,110	544	124	184	77	790	513	*340
29	811	......	1,560	645	2,140	484	124	140	85	665	463	*320
30	720	......	1,530	631	2,190	412	137	130	102	555	441	*354
31	683	......	1,970	......	1,250	......	220	113	......	475	......	......
Mean	776	517	1,040	2,040	687	793	276	194	94.7	361	528	436

* Ice conditions.

Monthly Discharge of Esopus Creek at Kingston, N. Y.
[Drainage area, 324 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1906.					
January	2,310	383	776	2.40	2.77
February	1,800	241	517	1.60	1.67
March	6,840	255	1,040	3.21	3.70
April	8,410	631	2,040	6.30	7.03
May	2,190	316	687	2.12	2.44
June	1,890	329	793	2.45	2.73
July	1,020	124	276	.852	.98
August	441	102	194	.599	.69
September	280	46	94.7	.292	.33
October	1,610	39	361	1.11	1.28
November	1,380	184	528	1.63	1.82
December	1,600	217	436	1.35	1.56
The year	....	....	....	....	27.00

RONDOUT CREEK AT ROSENDALE, N. Y.

This station was established by Robert E. Horton, July 6, 1901, at the highway bridge at Rosendale, discontinued November 7, 1903, and re-established in December, 1905, in co-operation with the New York water-supply commission.

The Delaware and Hudson canal, now abandoned above High Falls, draws its water-supply for the section from High Falls to Eddyville from Rondout creek at the feeder dam above Rosendale. The flow in the canal is, therefore, to be added to that at the gaging station to obtain the total run-off from the drainage area above this point.

The bed of the channel at the gaging station is composed of rock. The entire discharge, with the exception of the diversion into the canal, passes under the highway bridge at all stages.

Discharge measurements are made from the bridge, except at low water, when they are made by wading at a ford 1 mile down-stream. The bridge has a single span of 136 feet.

Gage readings are made twice each day by Anna E. Huben, by means of a chain gage supported by outriggers fastened to the floor-beams near the center of the down-stream side of the bridge. The bench mark is a circle cut in the up-stream corner of the bridge seat on the right-hand abutment.

In order to determine the run-off from the Rondout creek drainage basin, gagings of the flow in the Delaware and Hudson canal at the foot of the Rosendale level have been undertaken. The diversion to the canal, added to the measured discharge of Rondout gaging station, represents the total flow from the drainage basin.

The discharge of the canal was determined from observations of the depth of flow over the waste-weir, of the number of lockages, and of the opening of the lock-gates. Observations were made from June, 1901, to December, 1903, inclusive, and were resumed in December, 1905. The observations in 1905 have been made in co-operation with the New York water-supply commission.

Daily Gage Height, in Feet, of Rondout Creek at Rosendale, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	7.08	6.87	7.23	9.05	6.97	6.95	7.2	6.67	6.42	7.0	......	6.72
2	6.98	6.83	7.15	8.4	6.91	6.87	6.9	6.43	6.32	6.5	6.58	6.7
3	6.92	6.73	7.09	8.17	7.05	6.79	7.45	6.5	6.25	6.28	6.59	6.62
4	7.35	......	11.44	8.0	7.03	6.73	7.87	6.9	6.48	6.14	6.54	6.68
5	7.75	......	8.87	8.33	6.92	6.7	7.4	6.83	6.5	6.09	6.52	6.82
6	7.35	6.57	7.89	9.15	6.9	7.03	6.93	6.67	6.2	6.05	6.55	6.75
7	7.22	6.5	7.65	8.55	6.95	6.93	6.79	6.47	6.12	6.04	6.49	7.78
8	7.18	6.49	7.53	7.97	6.89	6.73	6.75	8.37	6.1	6.04	6.42	7.12
9	7.12	6.53	7.43	7.8	6.95	6.63	6.6	7.0	6.08	6.3	6.48	7.08
10	6.92	6.63	7.4	11.5	7.27	6.85	6.8	6.70	6.04	6.12	6.42	7.1
11	7.2	6.73	7.17	10.6	7.13	6.8	6.63	6.57	6.05	6.08	6.5	7.02
12	7.4	6.73	7.21	9.57	7.2	6.63	6.65	6.7	6.05	6.08	6.55	6.98
13	7.47	6.74	7.07	8.83	7.0	6.53	6.67	6.55	6.05	6.08	6.8	6.82
14	7.17	6.75	6.97	8.35	6.88	6.53	6.57	6.43	6.04	6.08	6.72	6.85
15	7.08	6.67	6.87	13.67	6.85	6.43	6.4	6.3	6.03	6.05	6.6	6.78
16	7.0	6.63	7.0	11.1	6.77	6.45	6.27	6.27	6.0	6.1	6.62	7.5
17	7.05	6.6	7.1	9.43	6.71	7.17	6.37	6.23	6.0	6.1	6.68	7.2
18	6.93	6.63	6.93	8.55	6.69	7.7	6.4	6.27	5.98	6.05	6.62	7.0
19	6.83	6.67	6.93	8.2	6.69	7.85	6.39	6.19	5.95	6.38	7.92	7.0
20	6.83	6.77	7.05	7.9	6.63	7.5	6.33	6.25	6.02	7.5	7.55	6.85
21	6.73	6.9	6.97	7.67	6.59	7.23	6.23	7.0	6.28	8.0	7.62	7.3
22	7.1	8.9	6.85	7.47	6.53	7.35	6.75	6.67	6.85	7.1	7.3	7.4
23	6,64	8.75	6.79	7.67	6.47	7.43	6.57	6.82	6.65	6.85	7.2	7.2
24	8.61	7.65	6.65	7.75	6.41	7.3	6.45	6.7	6.48	6.72	7.02	6.8
25	7.95	7.75	6.83	7.47	6.45	7.0	6.33	6.38	6.38	6.9	6.92	6.9
26	7.3	7.37	6.73	7.33	6.41	6.87	6.43	6.22	6.28	7.7	6.88	6.8
27	7.17	7.63	6.9	6.93	6.75	6.73	6.33	6.15	6.2	7.28	6.8	6.9
28	7.17	7.43	8.83	7.1	7.55	6.63	6.23	6.42	6.12	7.15	6.78	6.8
29	7.0	......	8.73	7.03	8.07	6.63	6.23	6.38	6.12	6.95	6.7	6.75
30	6.87	......	8.6	7.03	7.45	6.55	6.37	6.35	7.15	6.75	6.7	6.8
31	6.73	......	9.78	......	6.1	......	6.73	6.52	......	6.72	......	7.2

Current Meter Discharge Measurements of Rondout Creek at Rosendale, N. Y.

DATE.	Hydrographer.	Width.	Area of section.	Gage height.	Discharge.
1906.		*Feet.*	*Square feet.*	*Feet.*	*Second-feet.*
Aug. 23	C. C. Covert............	100	482	6.50	261

Rating table for Rondout Creek at Rosendale, N. Y., from 1901 *to* 1906.

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
Feet.	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*
6.00	50	7.30	799	8.60	2,108	10.80	4,675
6.10	86	7.40	885	8.70	2,216	11.00	4,920
6.20	121	7.50	971	8.80	2,323	11.20	5,180
6.30	157	7.60	1,071	8.90	2,431	11.40	5,440
6.40	192	7.70	1,171	9.00	2,539	11.60	5,706
6.50	228	7.80	1,272	9.20	2,764	11.80	5,978
6.60	290	7.90	1,372	9.40	2,984	12.00	6,250
6.70	353	8.00	1,472	9.60	3,222	13.00	7,640
6.80	415	8.10	1,578	9.80	3,461	14.00	9,070
6.90	478	8.20	1,683	10.00	3,700		
7.00	540	8.30	1,789	10.20	3,943		
7.10	626	8.40	1,894	10.40	4,186		
7.20	712	8.50	2,000	10.60	4,430		

The above table is applicable only for open-channel conditions. It is based upon discharge measurements made during 1901–1906.

Mean Daily Discharge, Second-feet, of Rondout Creek at Rosendale, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	609	459	738	2,600	521	509	712	334	199	540	321	365
2	528	434	669	1,890	484	459	478	203	164	228	278	353
3	490	372	617	1,650	583	409	928	228	228	150	284	303
4	842	335	5,490	1,470	566	372	1,340	478	221	100	253	341
5	1,120	284	2,400	1,820	490	353	885	434	228	82	240	427
6	842	271	1,360	2,710	478	566	497	334	121	68	259	......
7	730	228	1,120	2,050	509	497	409	217	93	64	225	......
8	695	224	1,000	1,440	472	372	384	1,860	86	64	199	......
9	643	247	911	1,270	509	309	290	540	75	157	221	......
10	490	309	885	5,570	773	446	415	353	64	93	199	......
11	712	372	686	4,430	652	415	309	271	68	79	228	......
12	885	372	721	3,190	712	309	322	353	68	79	259	......
13	945	378	600	2,360	540	247	334	259	68	79	415	......
14	686	384	521	1,840	465	247	271	203	64	79	365	......
15	609	341	459	8,600	446	203	192	157	61	68	290	......
16	540	309	540	5,050	396	210	146	146	50	86	303	......
17	583	290	626	3,020	359	686	182	132	50	86	341	......
18	497	309	497	2,050	347	1,170	192	146	43	68	303	......
19	434	341	497	1,680	347	1,320	189	117	32	185	1,390	......
20	434	365	583	1,370	309	970	168	139	57	971	1,020	......
21	372	478	521	1,140	284	738	132	540	150	1,470	1,090	......
22	626	2,430	446	945	247	842	384	334	446	626	799	......
23	316	2,270	409	1,140	217	911	271	427	322	446	712	......
24	2,120	1,120	322	1,220	196	799	210	353	221	365	557	......
25	1,420	1,220	434	945	210	540	168	185	185	478	490	......
26	799	859	372	825	196	459	203	128	150	1,170	465	......
27	686	1,100	478	497	384	372	168	103	121	782	415	......
28	686	911	2,360	626	1,020	309	132	199	93	669	403	......
29	540	......	2,250	566	1,550	309	132	185	93	509	353	......
30	459	......	2,110	566	928	259	182	175	669	384	353	......
31	372	......	3,430	......	86	......	372	240	......	365	......	......

Monthly Discharge of Rondout Creek at Rosendale, N. Y.

MONTH.	DISCHARGE IN SECOND-FEET.		
	Maximum.	Minimum.	Mean.
1906.			
January	2,120	316	700
March	5,490	322	1,100
April	8,600	497	2,150
May	1,550	86	493
June	1,320	203	520
July	1,340	132	355
August	1,860	103	315
September	669	32	150
October	1,470	64	342
November	1,390	199	434

Ice conditions from February 3 to noon, February 22; ice averaged about 0.5 foot in thickness; no report of ice after this date.

December 6, river frozen over; ice went out 3 p. m. December 31; ice averaged from 0.25 to 0.50 foot thick.

During the frozen period the readings were taken to the water-surface through a hole cut in the ice for January, February and March; and to surface of ice for December, with extra readings to water-surface.

Gage readings in December 1906.

DATE.	Water-surface.	Top of ice.	Thickness of ice at gage.
	Feet.	*Feet.*	*Feet.*
December 19	6.85	7.0	.12
December 22	7.4	7.2	.15
December 26	6.8	7.1	.25
December 29	6.75	7.25	.4

Daily Discharge, Second-feet, of Delaware and Hudson Canal at Creek Locks, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	......	......	......	......	21	22	......	19	22	20	16	......
2	......	......	......	......	21	21	21	24	......	19	17	......
3	......	......	......	......	22	......	21	22	......	22	18	......
4	......	......	......	......	20	23	21	23	21	19	......	......
5	......	......	......	......	20	21	22	......	25	20	18	......
6	......	......	......	......	......	19	23	21	19	19	19	......
7	......	......	......	......	23	23	22	21	21	......	19	......
8	......	......	......	......	21	21	......	21	22	17	18	......
9	......	......	......	14	20	23	21	20	......	17	18	......
10	......	......	......	13	21	......	23	23	24	20	19	......
11	......	......	......	8	20	23	22	22	22	19	......	......
12	......	......	......	12	22	22	24	......	22	20	17	......
13	......	......	......	11	......	22	22	24	20	22	19	......
14	......	......	......	11	23	22	23	21	20	......	19	......
15	......	......	......	......	22	23	......	23	20	28	19	......
16	......	......	......	8	20	21	21	22	......	20	18	......
17	......	......	......	12	20	......	23	22	19	21	20	......
18	......	......	......	17	20	21	21	20	19	20	......	......
19	......	......	......	19	22	20	21	......	17	18	19	......
20	......	......	......	17	......	22	22	22	22	20	20	......
21	......	......	......	19	22	21	22	22	24	......	18	......
22	......	......	......	......	20	23	......	21	21	19	22	......
23	......	......	......	18	20	21	23	23	......	19	21	......
24	......	......	......	17	19	......	22	20	18	21	19	......
25	......	......	......	17	20	22	21	22	18	16	......	......
26	......	......	......	17	21	23	23	......	22	17	17	......
27	......	......	......	16	......	23	21	21	18	19	15	......
28	......	......	......	17	21	22	20	20	23	......	18	......
29	......	......	......	......	20	23	......	22	20	17	15	......
30	......	......	......	20	......	23	22	21	......	17	19*	......
31	......	......	......	......	24	......	21	19	......	16	......	......
Mean	......	......	......	15.0	21.1	22.0	21.8	21.6	20.8	19.5	18.4	......

*Canal closed for the season.

MOHAWK RIVER DRAINAGE BASIN.

MOHAWK RIVER AT COHOES, N. Y.

This gaging station, which is located at the Cohoes Water Company's dam, was established April 1, 1904, by E. A. Lamb of this Department in conjunction with the United States Weather Bureau. The gage board is secured to inside of breakwater at north end of forebay about 200 feet above the dam, with its zero mark at elevation 153.47, Barge canal datum. The gage is graduated in feet and tenths and is read twice daily by Wm. Butler.

The present dam is of masonry, and is built immediately downstream from old wooden dam, which now acts as a timber approach, having a slope of 1 on 2½. The top of masonry dam slopes away from crest at the rate of 1 on 5, the total width being ten feet. The average elevation of crest is 154.2 and its length is 1,279 feet; there is an additional spillway in gate-house of 24 feet, making total length of spill, 1,303 feet. The discharge over the dam has been calculated by means of the weir formula, using coefficients derived from the Cornell University experiments made in 1898. The gate-house at entrance to hydraulic canal has four 7 x 8-foot and five 8 x 9-foot openings, controlled by gates.

Current Meter Discharge Measurements on Cohoes Company's Hydraulic Canal, at Cohoes, N Y.

DATE.	Hydrographer.	Width.	Area of section.	Mean velocity.	Elevation of water-surface.	Discharge.
1905.		*Feet.*	*Square feet.*	*Feet per second.*	*Feet.*	*Second-feet.*
April 28	C. A. Poole.......	100	630	2.38	154.0	1,500
Aug. 5	C. A. Poole.......	95	621	2.36	154.0	1,465
Sept. 27	C. A. Poole.......	95	611	2.65	154.1	1,620
Sept. 27	C. A. Poole.......	95	611	2.55	154.1	1,561

Current Meter Discharge Measurements of Cohoes Water Company's Hydraulic Canal at Cohoes, N. Y.

DATE.	Hydrographer.	Elevation of water-surface.	Width.	Area of section.	Mean velocity.	Discharge.
1905.			*Feet.*	*Square feet.*	*Ft. per second.*	*Second-feet.*
April 28	C. A. Poole.......	154.0	100	630	2.38	1,500
Aug. 3	C. A. Poole.......	154.0	45	621	2.36	1,465
Sept. 27	C. A. Poole.......	154.1	95	611	2.65	1,620
Sept. 27	C. A. Poole.......	154.1	95	611	2.55	1,561

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River above Cohoes Co.'s Dam, at Cohoes, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	156.8	156.9	154.9	154.5	154.7	......	154.9	154.9	155.0
2	......	......	......	157.7	156.5	154.8	154.4	154.5	......	154.8	154.9	154.9
3	......	......	......	157.7	156.3	154.8	154.5	154.4	......	155.2	154.8	154.9
4	......	......	......	156.7	155.9	154.8	154.6	154.4	155.0	155.3	154.9	155.0
5	......	......	......	156.6	156.1	154.8	154.4	154.6	155.0	155.3	154.9	154.8
6	......	......	......	156.7	155.9	155.0	154.6	154.4	155.0	155.3	154.9	154.7
7	......	......	......	156.6	155.9	155.0	154.5	154.6	155.6	155.4	......	154.5
8	......	......	......	157.1	156.0	155.2	154.6	154.7	154.7	155.4	......	153.8
9	......	......	......	157.3	155.5	155.9	154.5	154.7	154.7	155.4	......	153.7
10	......	......	......	157.7	155.4	156.4	154.5	154.7	154.6	155.4	......	153.8
11	......	......	......	157.6	155.3	156.1	154.3	154.6	154.6	155.3	......	154.0
12	......	......	......	156.8	155.2	155.9	154.2	154.6	154.5	155.0	......	153.2
13	......	......	......	157.0	155.1	155.6	154.4	154.5	154.4	155.1	......	153.2
14	......	......	......	156.5	155.0	155.0	154.3	154.3	154.3	155.3	......	153.3
15	......	......	......	156.2	154.9	154.9	154.3	154.2	154.3	155.4	......	153.2
16	......	......	......	156.2	155.0	154.9	154.4	154.1	154.3	155.3	......	153.2
17	......	......	......	155.9	155.2	154.8	154.4	154.0	154.2	155.0	......	153.6
18	......	......	......	156.0	155.5	154.8	154.3	153.9	154.1	154.8	......	153.7
19	......	......	......	156.0	155.5	154.7	154.3	154.1	154.3	154.7	......	153.3
20	......	......	......	156.0	155.1	154.7	154.5	154.2	154.3	154.6	155.8	153.1
21	......	......	......	155.6	155.3	154.5	154.4	154.5	154.3	154.8	155.3	153.1
22	......	......	......	155.5	155.5	154.4	154.3	156.2	154.2	157.4	154.9	153.1
23	......	......	......	155.5	155.3	154.3	154.4	155.7	154.4	156.9	155.1	153.1
24	......	......	......	155.9	155.1	154.3	154.6	155.4	154.4	156.1	155.3	153.1
25	......	......	......	156.0	154.9	154.5	154.4	155.4	154.6	155.6	155.2	153.8
26	......	......	......	156.8	154.9	154.3	154.4	155.5	155.0	155.3	155.3	153.7
27	......	......	......	156.4	154.9	154.1	154.3	155.5	155.2	155.2	155.4	154.0
28	......	......	......	157.0	155.0	154.1	154.2	......	155.3	155.1	155.3	154.6
29	......	......	......	157.0	155.1	154.1	154.6	......	155.1	155.0	155.2	156.0
30	......	......	......	157.0	155.1	154.0	154.7	......	155.0	155.0	155.1	155.8
31	......	......	......	......	155.2	......	154.6	......	......	155.0	......	155.9

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River above Cohoes Co.'s Dam, at Cohoes, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	156.0	154.9	153.8	158.3	155.8	154.2	155.3	155.0	155.4	155.2	154.5	156.2
2	156 0	154.9	153.9	158.0	155.7	154.3	155.5	154.9	155.3	155.0	155.0	155.9
3	155.8	154.9	154.1	157.9	155 5	154.4	155.9	154.8	155.2	154.8	155.0	157.0
4	155.7	154.9	153.9	158.1	155.7	154.3	155.9	154.8	155.4	154.6	154.9	157.4
5	155.5	155.0	154.0	157.7	156.0	154.4	155.7	154.7	157.5	154.4	154.8	157.1
6	155.2	155.0	154.0	157.8	156.0	154.4	155.5	154.6	157.3	154.4	154.8	156.8
7	155.1	154.9	154.1	157.9	155.8	154.6	155.4	154.5	157.1	154.3	155.0	156.6
8	155.0	154.8	154.2	157.7	155.8	154.8	155.3	154.9	157.0	154.3	155.3	156.3
9	155.0	154.8	154.3	156.5	155.7	155.1	155.2	154.9	156.7	154.2	155.2	156.0
10	155.0	154.9	154.3	156.4	155.7	155.3	155.2	154.8	156.4	154.1	155.3	155.9
11	155.3	154.9	154.4	156.4	155.5	155.3	155.3	154.8	156.1	154.3	155.4	155.8
12	155.5	155.0	154.4	156.3	155.4	155.2	155.2	154.9	156.2	154.4	155.4	155.5
13	155.7	154.8	154.4	156.0	155.1	155.1	155.1	154.8	156.0	154.6	155.3	155.3
14	156.2	154.8	154.4	156.0	155.3	155.0	155.0	155.0	155.9	154.9	155.2	154.9
15	156.3	154.8	154.4	156.3	155.1	155.0	155.0	155.3	155.8	155 2	155.1	154.4
16	155.9	154.7	154.5	156.3	155.1	154.9	155.0	155.7	155.7	155.1	155.2	154.3
17	155.6	154.7	154.6	156.3	155.3	155.0	155.0	156.0	155.6	155.0	155.2	154.3
18	155.4	154.7	154.8	156.2	155.3	155.0	154.9	155.8	155.5	154.9	155.1	154.5
19	155.2	154.5	154.9	156.1	155.4	155.2	155.0	155.4	155.5	155.3	155.3	154.8
20	155 2	154.2	156.9	156.0	155.4	155.3	154.9	155.4	155.4	155.4	155.2	155.2
21	155.2	154.1	156.3	156.2	155.3	155.7	154.9	155.4	155.3	155.6	155.1	155.6
22	155.3	154.0	156.1	156.5	155.2	156.3	154.8	155.2	155.3	155.6	155.1	155.1
23	155.1	153.9	155.9	156.5	154.9	156.4	154.7	155.3	155.4	155.3	155.0	155.9
24	155.1	153.8	156.2	156.2	154.6	156.3	154.5	155.3	155.2	155.2	155.3	155.9
25	155.0	153.8	156.4	156.0	154.2	155.9	154.5	155.4	155.3	155.1	155.2	155.8
26	154.9	153.8	158.6	156.0	154.2	155.5	154.3	155.6	155.3	155.0	155.2	155.5
27	154.9	153.8	158.8	155.8	154.0	155.2	154.5	155.3	155.2	155.0	155.1	155.4
28	154.8	153.8	159.0	155.6	154.3	155.1	154.4	155.4	155.2	154.8	155.3	155.3
29	154.8	......	158.2	155.5	154.3	155.2	154.2	155.2	155.3	154.8	155.3	155.5
30	154.8	......	158.5	155.7	154.2	155.1	154.6	155.3	155.3	154.7	156.5	155.5
31	154.9	......	158.5	......	154.3	......	154.6	155.4	......	154.6	......	155.6

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River above Cohoes Co.'s Dam, at Cohoes, N. Y.

DAY.	Jan.	Feb	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	155.57	155.8	155.5	156.9	155.2	155.3	155.3	154.5	154.9	155.0	155.0	155.6
2	155.3	158.7	155.4	156.6	155.1	155.0	155.2	155.0	154.8	155.2	155.0	155.6
3	155.1	155.3	155.5	156.3	155.2	154.8	155.1	154.9	154.5	155.0	155.1	155.6
4	155.3	155.1	156.4	155.8	155.7	154.9	155.2	154.8	154.3	155.1	155.0	155.7
5	155.4	155.3	157.0	155.7	156.0	154.8	155.1	155.0	154.7	155.1	155.1	155.4
6	155.5	155.4	156.5	156.4	155.5	155.1	154.9	154.8	154.2	155.2	155.1	155.5
7	155.4	155.2	157.0	156.1	155.4	155.0	154.8	154.9	154.1	155.3	155.2	155.5
8	155.4	155.1	155.7	156.0	155.5	154.9	155.0	154.7	154.1	155.3	155.2	155.3
9	155.5	155.0	155.3	155.9	155.3	155.0	154.9	154.7	155.0	155.2	155.1	155.3
10	155.3	155.1	155.2	156.4	155.3	155.3	155.0	154.8	154.0	155.1	155.1	155.3
11	155.2	155.1	155.5	156.9	155.2	155.2	155.0	155.1	153.9	155.0	155.2	155.2
12	155.1	154.9	155.4	156.6	155.3	155.1	155.0	155.1	153.5	154.9	155.1	155.3
13	155.1	155.0	155.3	156.1	155.2	155.0	154.8	154.8	153.5	155.0	155.0	155.3
14	155.2	154.9	155.3	156.2	155.3	154.9	154.8	154.8	153.5	155.4	155.1	155.5
15	155.0	154.9	155.4	157.2	155.1	155.1	154.9	154.8	153.5	155.3	155.2	156.6
16	155.2	154.8	155.3	157.2	155.1	155.3	154.6	154.9	153.8	155.1	155.2	156.0
17	155.3	155.0	155.2	156.9	155.1	155.9	154.5	154.8	153.7	155.3	155.1	156.0
18	155.3	155.1	155.4	156.8	155.0	156.2	154.5	154.8	153.7	155.1	155.3	155.7
19	155.2	155.0	155.3	156.7	155.1	155.8	154.6	154.4	153.7	155.1	155.3	155.9
20	155.3	155.0	155.1	156.6	155.1	155.4	154.5	154.3	153.7	155.3	155.6	155.7
21	155.3	155.1	154.7	156.5	155.0	155.1	154.5	154.4	153.6	155.5	155.6	155.5
22	155.5	155.6	154.9	156.5	154.9	155.0	154.8	154.4	154.6	155.3	155.1	155.5
23	156.6	156.8	154.6	156.5	154.8	154.9	154.6	154.1	154.9	155.2	155.8	155.5
24	157.6	156.1	154.6	156.2	154.7	155.0	154.5	154.0	154.4	155.3	155.6	155.3
25	157.1	156.1	154.8	155.9	154.7	154.9	154.5	154.1	154.4	155.2	155.6	155.5
26	156.9	155.9	154.6	155.7	154.9	154.8	154.5	154.1	154.4	155.2	155.5	155.5
27	156.5	155.6	155.0	155.5	156.9	155.0	154.5	154.3	154.4	155.3	155.6	155.5
28	156.2	155.4	157.3	155.4	156.8	154.9	154.7	154.6	154.5	155.3	155.7	155.9
29	156.0	......	157.4	155.4	156.4	154.8	155.0	154.6	154.5	155.2	155.5	155.1
30	155.9	......	157.0	155.2	156.1	155.0	154.7	154.6	154.7	155.2	155.5	155.7
31	155.8	......	156.7	......	155.6	......	154.5	154.9	......	155.1	......	155.6

MOHAWK RIVER NEAR DUNSBACH FERRY, SARATOGA COUNTY, N. Y.

This gaging record is kept at the dam of the West Troy Water Company, one-fifth mile above Dunsbach Ferry bridge, nine miles from the mouth of the river. The dam is in two sections, situated on opposite sides of a Hudson river shale island. The left wing at the upper end of the island has a crest length of 380 feet. The right wing, 500 feet down-stream at the foot of the island, has a crest 280 feet long.

The record was established, March 12, 1898, for the primary purpose of checking a system of levels for the United States Board of Engineers on Deep Waterways, by D. J. Howell, C. E., who has furnished the earlier portion of the record. No record was kept from April 1, 1899, to August 1, 1900. During the period 1900–1906, the record was maintained under the direction of the U. S. Geological Survey in co-operation with this Department.

In the pumping station adjoining the dam there are two turbines of the old American type, one 66 inches and the other 75 inches in diameter. A new 54-inch Victor turbine was installed during 1902. The discharge is calculated from the recorded daily run of the water-wheels and working head. The turbines drive pumps, taking water from the river for water-supply purposes, the capacity of the pumps being 3,500,000 gallons per day, equivalent to a continuous flow of 5.4 second-feet.

The dam is of masonry, with a flat granite crest 5.5 feet wide. It was rebuilt in 1903, and a new profile obtained. The crest gage is attached to the timber cribbing 50 feet above the lower section of the dam, with its zero mark at elevation 172.00, referred to the United States Deep Waterways datum. Gage readings are taken twice daily at intervals of about 12 hours, by Robert Wilson. The mean of the two daily readings is used in computing the flow. The discharge over the main dam has been calculated by means of the weir formula, using coefficients derived from the United States Geological Survey experiments.

During high water the current of the stream through the cross-section of the channel leading to the lower dam has a velocity of several feet per second. The head due to this velocity has been added to the observed head as a correction for velocity of approach to the lower dam. The upper dam is situated 450 feet up-stream from the crest gage.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River at Dunsbach Ferry, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	......	......	......	......	175.6	175.4	174.9	175.3	176.9
2	......	......	......	......	......	......	......	175.5	175.3	175.0	176.0	176.2
3	......	......	......	......	......	......	......	175.2	175.5	175.2	176.1	177.6
4	......	......	......	......	......	......	......	175.0	177.6	175.3	175.8	179.8
5	......	......	......	......	......	......	......	174.8	179.0	175.3	175.7	178.3
6	......	......	......	......	......	......	......	174.6	178.8	175.2	175.6	177.3
7	......	......	......	......	......	......	......	174.9	177.6	175.0	176.0	176.8
8	......	......	......	......	......	......	......	175.7	176.6	174.8	176.7	176.4
9	......	......	......	......	......	......	175.2	175.1	176.2	174.8	176.6	176.1
10	......	......	......	......	......	......	175.2	174.9	176.8	174.7	176.2	175.8
11	......	......	......	......	......	......	175.1	174.7	175.5	174.7	175.8	175.7
12	......	......	......	......	......	......	175.1	174.7	175.4	175.1	175.7	175.6
13	......	......	......	......	......	......	175.1	175.0	175.8	176.5	175.6	175.5
14	......	......	......	......	......	......	174.9	175.4	175.8	176.4	175.5	175.5
15	......	......	......	......	......	......	175.1	175.4	175.5	176.2	175.5	175.4
16	......	......	......	......	......	......	175.5	175.7	175.3	175.8	175.4	175.4
17	......	......	......	......	......	......	175.5	177.1	175.1	175.5	175.3	175.2
18	......	......	......	......	......	......	174.9	176.3	175.7	175.3	175.2	175.1
19	......	......	......	......	......	......	174.8	175.7	176.2	175.4	175.0	175.0
20	......	......	......	......	......	......	174.9	175.1	176.9	176.2	175.0	175.1
21	......	......	......	......	......	......	175.1	175.0	176.9	176.4	175.0	175.4
22	......	......	......	......	......	......	175.0	174.9	176.4	176.2	174.9	176.5
23	......	......	......	......	......	......	174.9	174.9	175.9	175.9	174.9	177.1
24	......	......	......	......	......	......	174.7	174.8	175.6	175.7	174.9	176.5
25	......	......	......	......	......	......	174.7	174.7	175.4	175.5	174.8	176.4
26	......	......	......	......	......	......	174.7	174.6	175.2	175.4	174.9	176.0
27	......	......	......	......	......	......	174.8	174.6	175.1	175.2	175.1	175.8
28	......	......	......	......	......	......	174.7	174.6	175.0	175.1	175.3	175.5
29	......	......	......	......	......	......	174.6	174.5	175.0	175.1	175.4	175.6
30	......	......	......	......	......	......	174.6	174.5	174.9	175.0	177.5	176.3
31	......	......	......	......	......	......	174.5	174.9	......	175.0	......	176.2

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River at Dunsbach Ferry, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	176.0	175.4	175.4	178.0	175.6	175.7	175.3	174.6	174.6	174.4	175.0	175.8
2	175.7	175.2	175.3	177.2	175.7	175.5	176.2	174.6	174.4	174.6	175.0	175.8
3	175.2	175.0	175.2	176.8	176.8	175.3	176.1	174.6	174.4	174.4	175.0	175.6
4	175.2	174.8	178.8	176.6	177.2	175.2	175.6	174.6	174.4	174.4	175.0	175.0
5	175.6	174.8	178.0	177.2	176.8	175.0	175.6	174.6	174.4	174.4	174.8	174.8
6	176.1	174.7	177.0	177.3	176.4	175.0	175.7	174.6	174.2	174.4	174.8	174.8
7	176.0	174.8	176.6	177.5	176.2	175.2	175.2	175.0	174.2	174.4	174.8	175.2
8	175.5	174.9	176.1	176.8	175.8	175.0	175.0	174.8	174.4	174.4	174.6	175.4
9	175.0	174.9	175.9	176.4	175.6	175.0	174.9	174.8	174.2	174.6	174.6	175.4
10	174.8	174.9	175.8	176.4	175.6	175.0	174.8	174.6	174.2	174.6	174.6	175.2
11	174.9	174.9	175.8	177.4	175.8	175.5	175.2	174.6	174.2	174.6	174.8	175.0
12	175.1	174.9	175.6	178.4	175.7	175.6	175.6	174.4	174.2	174.8	174.8	175.0
13	175.4	174.9	175.4	178.2	175.6	175.6	175.2	174.4	174.2	174.8	175.0	175.2
14	175.6	174.9	175.2	177.8	175.5	175.2	175.0	174.4	174.2	174.8	175.2	175.0
15	175.4	174.9	175.1	178.6	176.1	175.0	175.0	174.4	174.2	174.8	175.2	175.0
16	175.4	174.9	175.2	180.0	175.9	175.4	174.9	174.4	174.2	174.6	175.2	175.2
17	175.4	174.8	175.0	178.8	175.6	175.8	174.9	174.4	174.0	174.6	175.0	176.3
18	175.4	174.8	175.0	178.3	175.4	176.4	174.8	174.4	174.0	174.6	175.0	176.3
19	175.4	174.8	175.0	177.8	175.3	176.2	174.7	174.2	174.0	174.6	175.8	176.0
20	175.2	174.9	174.9	177.6	175.2	176.0	174.6	174.2	174.0	174.8	177.6	175.8
21	175.3	175.0	174.8	177.4	175.0	175.6	174.6	174.2	174.0	175.2	177.0	175.6
22	176.0	175.9	174.8	177.4	175.0	175.2	174.6	174.4	174.2	175.8	177.0	175.2
23	178.0	177.7	174.7	177.3	174.9	175.2	174.6	174.4	174.4	175.6	176.6	175.2
24	179.2	177.0	174.8	177.0	174.8	175.1	174.3	174.4	174.4	175.0	176.2	175.2
25	178.7	176.8	174.8	176.6	174.8	175.0	174.5	174.4	174.6	175.0	176.0	175.1
26	177.6	177.2	174.8	176.2	174.8	175.0	174.5	174.4	174.6	175.0	175.8	175.1
27	177.0	176.6	175.1	176.0	174.9	174.9	174.5	174.6	174.6	175.0	175.8	175.0
28	176.4	175.9	181.1	175.9	178.2	174.9	174.4	174.6	174.4	175.0	175.8	174.9
29	176.0	......	178.6	175.8	177.8	174.8	174.5	174.8	174.4	175.0	176.0	174.9
30	175.5	......	178.2	175.7	176.8	174.8	174.5	174.6	174.4	175.0	176.0	175.0
31	175.5	......	178.8	......	176.0	......	174.6	174.6	......	175.2	......	175.2

Mean Daily Discharge, Second-feet, of Mohawk River at Dunsbach Ferry, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	7,181	4,757	4,841	20,351	5,440	5,921	4,191	1,871	1,641	1,411	3,101	6,681
2	5,617	3,591	4,191	14,691	5,660	5,061	8,721	1,871	1,411	1,411	2,931	6,171
3	3,897	2,931	3,981	11,861	11,374	4,191	7,941	1,871	1,411	1,641	2,761	5,701
4	3,507	2,271	30,723	10,681	14,430	3,591	5,701	1,761	1,301	1,411	2,761	3,261
5	5,407	2,601	19,779	14,691	11,507	3,261	5,061	1,641	1,181	1,301	2,601	2,601
6	7,857	2,101	13,160	15,031	9,841	3,261	4,841	1,761	951	1,181	2,431	2,601
7	7,097	2,271	10,804	16,401	8,721	3,761	3,981	2,761	1,066	1,181	2,101	3,761
8	4,977	2,761	7,845	11,861	6,681	3,261	3,261	2,431	1,181	1,521	1,981	4,621
9	2,847	2,761	6,931	9,561	5,701	3,101	2,761	2,271	1,066	1,641	1,871	4,191
10	2,347	2,761	6,681	9,281	5,701	3,261	2,601	1,981	951	1,787	1,981	3,431
11	2,677	2,601	6,171	15,711	6,421	4,977	3,761	1,871	841	1,787	2,101	3,101
12	3,347	2,761	5,491	23,041	5,921	5,617	5,271	1,521	841	2,017	2,431	3,101
13	4,537	2,761	4,411	21,309	5,271	5,187	3,981	1,411	841	2,517	3,261	3,431
14	5,187	2,601	3,761	18,131	5,061	3,794	3,261	1,411	841	2,347	3,431	3,101
15	4,537	2,761	3,431	24,621	7,681	3,196	3,101	1,181	841	2,187	3,761	2,931
16	4,537	2,761	3,460	36,541	6,681	4,841	2,761	1,181	841	1,897	3,591	3,761
17	4,757	2,431	3,261	26,661	5,271	6,681	2,761	1,181	786	1,787	3,101	9,001
18	4,537	2,431	3,101	22,251	4,621	9,561	2,271	1,181	731	1,787	2,931	8,721
19	4,327	2,431	3,101	18,871	4,191	8,721	2,101	1,066	730	1,871	6,171	7,431
20	3,897	2,761	2,761	17,081	3,761	7,681	1,981	951	730	2,101	17,421	6,421
21	4,107	3,101	2,601	16,061	3,261	5,701	1,871	1,066	730	3,761	13,421	5,271
22	7,597	6,931	2,271	15,371	3,101	3,981	1,871	1,181	896	6,681	12,801	3,761
23	19,897	17,761	2,101	15,031	2,761	3,591	1,871	1,181	1,301	5,271	10,961	3,761
24	29,937	12,801	2,389	13,421	2,601	3,431	1,641	1,521	1,521	3,261	8,721	3,761
25	25,327	11,861	2,347	10,681	2,431	3,101	1,641	1,521	1,761	2,761	7,181	3,431
26	16,997	14,041	2,347	8,721	2,431	3,101	1,641	1,521	1,761	2,931	5,921	3,261
27	12,717	10,961	3,431	7,681	2,761	2,761	1,411	1,761	1,641	3,101	6,171	2,931
28	9,197	6,931	47,850	6,931	21,461	2,761	1,411	1,981	1,411	3,101	6,421	2,761
29	7,097	......	24,360	6,421	18,131	2,601	1,641	2,101	1,521	3,101	6,931	2,761
30	4,977	......	21,777	5,921	12,171	2,271	1,641	1,871	1,521	3,261	7,431	2,931
31	4,977	......	25,737	......	7,681	......	1,871	1,761	......	3,431	......	3,591
Mean	7,600	4,982	9,197	15,496	7,056	4,407	3,188	1,634	1,142	2,434	5,289	4,266

Monthly Discharge of Mohawk River at Dunsbach Ferry, N. Y.
[Drainage area, 3,440 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1906.					
January	29,937	2,347	7,600	1.212	1.395
February	17,761	2,101	4,982	1.450	1.51
March	47,850	2,101	9,197	2.666	3.078
April	36,541	5,921	15,496	4.509	5.032
May	21,461	2,431	7,056	2.053	2.363
June	9,561	2,271	4,407	1.282	1.428
July	8,721	1,411	3,188	.928	1.07
August	2,761	951	1,634	.475	.548
September	1,761	730	1,142	.332	.370
October	6,681	1,181	2,434	.708	.816
November	17,421	1,871	5,289	1.539	1.718
December	9,001	2,601	4,266	1.241	1.430
The year	....	....	....	....	20.758

MOHAWK RIVER AT REXFORD FLATS, N. Y.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River above dam at Craig P. O., near Rexford Flats, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	......	......	......	......	......	209.9	209.5	209.6	211.2
2	......	......	......	......	......	......	......	......	209.7	209.5	210.6	210.8
3	......	......	......	......	......	......	......	......	209.8	209.5	210.4	212.6
4	......	......	......	......	......	......	......	......	212.4	209.5	210.2	214.4
5	......	......	......	......	......	......	......	......	213.7	209.7	210.1	212.7
6	......	......	......	......	......	......	......	......	213.3	209.6	210.2	211.8
7	......	......	......	......	......	......	......	......	211.9	209.5	210.7	211.1
8	......	......	......	......	......	......	......	......	211.1	209.5	210.9	210.8
9	......	......	......	......	......	......	......	......	210.7	209.4	210.7	210.4
10	......	......	......	......	......	......	......	......	210.1	209.3	210.5	210.2
11	......	......	......	......	......	......	......	......	209.9	209.3	210.3	210.1
12	......	......	......	......	......	......	......	......	209.9	209.4	210.1	210.1
13	......	......	......	......	......	......	......	......	210.1	211.1	210.0	209.8
14	......	......	......	......	......	......	......	......	210.3	210.8	210.0	209.6
15	......	......	......	......	......	......	......	......	210.0	210.6	209.9	209.5
16	......	......	......	......	......	......	......	......	209.8	210.3	209.9	209.4
17	......	......	......	......	......	......	......	......	214.2	210.0	209.8	209.4
18	......	......	......	......	......	......	......	......	212.5	209.8	209.7	209.4
19	......	......	......	......	......	......	......	......	211.5	209.9	209.7	209.4
20	......	......	......	......	......	......	......	......	211.3	210.4	209.7	209.8
21	......	......	......	......	......	......	......	......	211.5	210.9	209.6	210.7
22	......	......	......	......	......	......	......	......	210.9	210.6	209.6	212.1
23	......	......	......	......	......	......	......	......	210.4	210.3	209.6	211.4
24	......	......	......	......	......	......	......	209.4	210.1	210.2	209.6	211.0
25	......	......	......	......	......	......	......	209.3	209.9	210.0	209.6	210.7
26	......	......	......	......	......	......	......	209.3	209.7	209.9	209.6	210.3
27	......	......	......	......	......	......	......	209.3	209.7	209.8	209.7	210.1
28	......	......	......	......	......	......	......	209.2	209.6	209.7	209.7	209.8
29	......	......	......	......	......	......	......	209.2	209.6	209.7	209.9	210.0
30	......	......	......	......	......	......	......	209.2	209.5	209.6	211.9	210.8
31	......	......	......	......	......	......	......	209.6	......	209.6	......	210.8

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River above dam at Craig P. O., near Rexford Flats, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	210.6	210.0	210.0	......	210.1	209.7	210.5	......	209.2	208.2	209.4	210.1
2	210.2	209.6	209.8	211.5	210.2	209.5	210.7	......	......	208.2	209.4	210.0
3	209.8	209.4	209.6	211.2	211.3	209.5	210.1	......	......	208.2	209.4	209.6
4	209.7	209.4	212.8	211.0	211.4	209.4	209.7	......	......	208.2	209.3	209.6
5	210.2	209.4	212.6	211.2	211.0	209.3	209.5	208.2	......	208.2	209.3	209.6
6	210.6	209.4	211.2	211.6	210.7	209.3	209.4	209.2	......	208.2	209.3	209.8
7	210.2	209.4	210.8	211.0	210.3	209.4	209.3	209.2	......	208.2	209.3	209.8
8	209.8	209.3	210.4	211.0	210.1	209.3	209.2	209.2	......	208.2	209.3	210.1
9	209.6	209.3	210.4	210.8	209.9	209.4	208.7	208.7	208.2	208.2	209.3	210.1
10	209.4	209.3	210.2	210.6	209.9	209.6	209.2	208.2	208.2	208.2	209.3	210.0
11	209.4	209.3	210.1	211.5	209.8	209.6	209.5	208.2	208.2	208.7	209.3	209.8
12	209.6	209.3	210.0	212.6	209.8	209.6	209.4	208.2	208.2	209.2	209.3	209.7
13	209.7	209.3	210.0	212.6	209.8	209.5	209.3	208.2	208.2	209.2	209.3	209.6
14	209.8	209.3	209.8	212.3	209.7	209.4	209.2	208.2	208.2	209.2	209.4	209.7
15	209.8	209.3	209.7	212.6	209.6	209.3	......	208.2	208.2	209.2	209.4	210.2
16	209.9	209.3	209.7	214.3	209.6	209.8	......	208.2	208.2	209.2	209.4	210.7
17	209.8	209.3	209.7	213.2	209.6	210.9	......	208.2	208.2	208.2	209.4	210.7
18	209.8	209.3	209.6	212.5	209.5	210.8	......	208.2	208.2	208.2	209.5	210.4
19	209.7	209.3	209.7	212.3	209.5	210 2	......	208.2	208.2	208.2	210.3	210.1
20	209.8	209.4	209.7	212.3	209.5	209.8	......	208.2	208 2	208.7	211.9	209.9
21	210.0	209.4	209.7	212.0	209.4	209.6	......	208.2	208.2	209.6	211.3	209.8
22	210.6	210.4	209.7	211.8	209.3	209.6	......	209.2	208.2	210.0	211.5	209.6
23	212.5	212.2	209.6	211.6	209.2	209.6	......	209.2	......	209.6	211.5	209.6
24	214.0	211.4	209.5	211.3	209.2	209.6	......	208.2	......	209.6	211.3	209.5
25	213.0	211.6	209.5	211.0	209.2	209.7	......	208.2	......	209.5	210.9	209.5
26	212.0	211.5	209.5	210.7	209.2	209.6	......	208.2	......	209.5	210.7	209.5
27	211.4	211.0	209.7	210.3	208.9	209.6	......	208.7	......	209.5	210.3	209.5
28	210.8	210.3	214.5	210.1	211.2	209.4	......	209.2	......	209.5	210.0	209.6
29	210.6	......	212.6	209.9	211.9	209.3	......	210.2	......	209.5	209.8	209.6
30	210.2	......	212.7	210.0	211.0	209.6	......	210.2	208.2	209.5	210.0	209.9
31	210.1	......	......	......	210.0	......	......	209.2	......	209.4	......	210.1

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River Rexford Flats Feeder.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	......	......	......	......	208.6	208.8	208.8	208.9	209.0
2	......	......	......	......	......	......	......	208.8	209.2	208.9	208.8	208.9
3	......	......	......	......	......	......	......	208.7	208.8	208.8	208.9	......
4	......	......	......	......	......	......	......	208.7	209.2	209.0	208.9	......
5	......	......	......	......	......	......	......	208.8	209.1	208.9	208.9	......
6	......	......	......	......	......	......	......	208.9	209.1	208.8	208.9	......
7	......	......	......	......	......	......	......	208.8	209.2	208.9	208.9	......
8	......	......	......	......	......	......	......	208.9	209.0	208.9	208.9	......
9	......	......	......	......	......	......	208.6	208.6	209.2	208.8	208.9	......
10	......	......	......	......	......	......	208.4	208.9	209.3	208.8	208.8	......
11	......	......	......	......	......	......	208.6	208.8	209 2	208.9	208.8	......
12	......	......	......	......	......	......	208.5	208.8	208.9	209.0	208.8	......
13	......	......	......	......	......	......	208.6	208.9	209.0	208.8	208.9	......
14	......	......	......	......	......	......	208.8	208.8	208.8	208.8	208.8	......
15	......	......	......	......	......	......	208.9	208.8	208.9	208.8	208.8	......
16	......	......	......	......	......	......	208.9	208.7	209.0	208.8	208.8	......
17	......	......	......	......	......	......	208.8	208.8	209.0	208.9	208.9	......
18	......	......	......	......	......	......	208.9	208 9	208.9	208.8	208.8	......
19	......	......	......	......	......	......	208.9	208.9	208.9	208.9	208.8	......
20	......	......	......	......	......	......	208.6	208.8	208.9	209.0	208.9	......
21	......	......	......	......	......	......	208.9	208.7	209 0	208.9	208.8	......
22	......	......	......	......	......	......	208.8	208.8	208.8	208.8	208.9	......
23	......	......	......	......	......	......	209.0	208.8	209.0	208.9	208.8	......
24	......	......	......	......	......	......	209.2	209.0	209.0	208.9	208.8	......
25	......	......	......	......	......	......	208.9	208.8	209.0	208.8	208.8	......
26	......	......	......	......	......	......	208.8	209.0	208.8	208 9	208.9	......
27	......	......	......	......	......	......	209.0	208.9	208.9	208.9	208.8	......
28	......	......	......	......	......	......	208.8	208.9	209.0	208.9	209.0	......
29	......	......	......	......	......	......	208.9	208.8	208.9	208.5	208.9	......
30	......	......	......	......	......	......	208.8	208.9	208.8	208.9	208.9	......
31	......	......	......	......	......	......	208.8	209.0	......	208.8	......	......

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* Upper gage 269 feet below head of feeder.

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River Rexford Flats Feeder.**

DAY.	Jan.	Feb.	March.	April	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1								208.4	208.7	208.7	208.6	208.7
2								208.6	208.7	208.6	208.5	208.7
3								208.4	208.6	208.5	208.7	
4								208.4	208.8	208.7	208.7	
5								208.5	208.7	208.6	208.6	
6								208.6	208.7	208.5	208.6	
7								208.5	208.8	208.7	208.6	
8								208.7	208.6	208.6	208.7	
9							208.4	208.5	208.7	208.5	208.7	
10							208.2	208.6	208.9	208.6	208.6	
11							208.5	208.5	208.9	208.6	208.7	
12							208.3	208.6	208.7	208.7	208.6	
13							208.4	208.6	208.7	208.6	208.6	
14							208.5	208.5	208.5	208.6	208.6	
15							208.6	208.6	208.6	208.6	208.6	
16							208.7	208.5	208.7	208.5	208.5	
17							208 5	208.5	208.6	208.6	208.6	
18							208.7	208.7	208.7	208.5	208.5	
19							208.6	208.6	208.7	208.7	208.5	
20							208.4	208.6	208.7	208.7	208.6	
21							208.7	208.4	208.6	208.6	208.6	
22							208.6	208.5	208.7	208.5	208.6	
23							208.7	208.6	208.6	208.6	208.6	
24							209.0	208.7	208.7	208.6	208.6	
25							208.7	208.6	208.7	208.5	208.6	
26							208.6	208.7	208.6	208.6	208.6	
27							208.7	208.6	208.6	208.7	208.5	
28							208.7	208.6	208.7	208.6	208.7	
29							208.5	208.5	208.7	208.5	208.7	
30							208.5	208.7	208.6	208.6	208.6	
31							208.6	208.7		208.5		

* Lower gage, at entrance of feeder to Erie canal.

Current Meter Discharge Measurements of Erie Canal Feeder at Rexford Flats, N. Y.

DATE.	Gage height.	Elevation of water-surface.	Width.	Area of section.	Mean velocity.	Discharge.
1905.	*Feet.*		*Feet.*	*Square feet.*	*Ft. per second.*	*Second-feet.*
August 22	1.5	208.36	34.2	124	1.48	183

MOHAWK RIVER AT SCHENECTADY, N. Y.

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River at Schenectady, N. Y.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	214.9	209.8	209.1	209.8	209.7	212.4	210.2	209.8
2	......	......	......	......	214.2	209.8	209.1	209.6	209.6	211.9	210.2	209.8
3	......	......	......	216.7	213.9	209.8	209.1	209.5	209.7	211.7	210.2	209.8
4	......	......	......	214.6	213.1	209.8	209.1	209.4	210.0	210.3	210.0	209.8
5	......	......	......	214.1	212.8	209.8	209.1	209.2	209.9	210.1	210.0	209.8
6	......	......	......	214.4	212.7	209.8	209.1	209.2	209.7	210.1	210.0	209.8
7	......	......	......	214.5	212.2	209.8	209.1	209.5	209.7	210.1	210.0	209.8
8	......	......	......	215.6	211.9	210.0	209.1	209.6	209.7	210.1	210.0	209.8
9	......	......	......	216.4	211.5	212.3	209.1	209.7	209.7	210.1	210.0	209.8
10	......	......	......	217.8	211.3	213.5	209.1	209.9	209.7	210.1	210.0	209.8
11	......	......	......	217.9	210.7	212.5	209.2	209.8	209.7	210.1	210.0	209.8
12	......	......	......	216.5	210.4	211.5	209.2	209.7	209.7	210.8	210.0	209.8
13	......	......	......	215.1	210.2	210.6	209.5	209.6	209.7	211.9	210.0	209.7
14	......	......	......	213.9	209.9	210.2	209.3	209.7	209.7	211.3	210.0	209.7
15	......	......	......	213.0	209.7	209.9	209.2	209.6	210.0	210.8	210.5	209.7
16	......	......	......	212.6	210.2	209.8	209.1	209.6	210.0	210.4	210.2	209.7
17	......	......	......	212.1	210.8	209.8	209.6	209.7	209.8	210.0	210.2	209.7
18	......	......	......	212.3	211.0	209.6	209.5	209.7	209.7	210.0	210.2	209.7
19	......	......	......	212.7	210.7	209.4	209.3	209.7	209.7	210.0	210.2	209.7
20	......	......	......	212.5	210.8	209.2	209.2	210.0	209.7	210.0	210.2	209.7
21	......	......	......	211.6	211.1	209.1	209.1	212.5	209.7	211.7	210.1	209.7
22	......	......	......	211.6	211.0	209.1	209.1	212.4	209.7	216.7	210.0	209.7
23	......	......	......	211.6	210.4	209.2	209.1	211.7	209.7	214.1	210.0	209.7
24	......	......	......	211.8	210.0	209.1	209.1	212.4	209.7	212.6	210.0	209.7
25	......	......	......	213.1	209.8	209.1	209.1	211.5	209.9	211.5	210.0	209.7
26	......	......	......	214.0	209.8	209.1	209.1	210.6	210.4	210.9	210.0	209.7
27	......	......	......	213.9	209.8	209.1	209.5	210.2	212.4	210.4	209.8	209.7
28	......	......	......	215.0	209.8	209.1	209.9	210.0	211.2	210.4	209.8	214.9
29	......	......	......	216.1	209.8	209.1	209.9	209.8	210.2	210.2	209.8	216.8
30	......	......	......	215.2	209.8	209.0	210.0	209.7	210.5	210.2	209.8	213.8
31	......	......	......	......	209.8	......	210.1	209.7	......	210.2	......	213.8

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River at Schenectady, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	213.8	210.0	209.6	220.0	211.6	210.0	210.8	211.1	210.5	209.8	209.8	213.0
2	214.2	209.9	209.6	217.6	211.4	209.9	210.3	210.7	210.5	209.8	210.1	212.1
3	214.3	209.9	209.6	215.4	211.2	209.8	213.3	210.3	210.8	209.9	210.4	215.4
4	212.6	209.9	209.6	214.7	211.2	209.7	213.3	210.2	214.7	210.3	210.8	218.5
5	211.4	209.9	209.5	215.4	211.2	209.6	212.1	210.0	215.7	210.3	210.6	214.6
6	210.8	209.9	209.5	216.4	211.1	209.6	211.1	209.9	216.2	210.3	211.2	213.1
7	211.2	209.9	209.5	216.7	210.9	209.6	210.7	210.3	214.0	210.1	211.7	212.2
8	215.0	209.9	209.5	214.5	210.9	209.6	210.4	210.8	212.2	210.1	212.0	211.5
9	214.0	209.8	209.6	213.3	210.7	209.6	210.4	210.4	211.6	209.9	211.7	211.3
10	212.6	209.8	209.6	212.8	210.5	209.6	210.2	210.0	211.0	209.8	211.3	211.0
11	211.9	209.8	209.6	212.9	210.4	209.9	210.0	209.9	210.6	210.3	210.9	210.5
12	212.1	209.8	209.6	215.1	210.3	210.3	210.2	210.0	210.7	211.7	210.5	210.4
13	213.5	209.8	209.6	214.6	210.3	210.3	210.2	210.3	211.2	212.1	210.3	210.4
14	213.4	209.8	209.6	213.9	210.3	210.0	210.1	210.5	210.9	211.9	210.2	210.3
15	213.2	209.8	209.6	213.4	210.2	209.8	210.2	210.4	210.5	211.2	210.2	210.3
16	212.2	209.7	209.6	213.3	210.2	209.8	210.3	212.5	210.2	210.8	210.0	210.3
17	211.6	209.7	209.6	212.2	210.3	209.7	210.1	212.9	210.2	210.8	210.0	210.2
18	211.4	209.7	209.6	211.7	210.3	210.2	209.8	211.6	210.4	210.5	209.9	210.1
19	211.2	209.7	210.6	211.4	210.3	210.3	209.9	211.2	212.8	210.5	210.0	210.0
20	211.0	209.7	217.1	211.1	210.3	210.8	210.1	210.4	212.5	210.8	210.0	210.0
21	211.0	209.7	214.7	212.2	210.1	210.9	210.2	210.3	212.6	212.2	210.0	209.9
22	211.0	209.6	214.3	213.4	210.1	213.9	210.2	209.8	211.7	212.5	209.8	212.9
23	210.8	209.6	212.8	213.6	210.1	213.9	209.8	210.0	210.4	212.0	209.8	212.4
24	210.7	209.6	212.8	212.8	210.1	213.1	209.9	210.0	212.5	211.3	209.8	211.8
25	210.5	209.6	215.2	211.8	210.1	211.6	209.9	210.0	212.1	210.6	209.8	211.8
26	210.4	209.6	220.8	211.6	210.1	210.5	210.0	210.0	210.3	209.9	209.8	211.1
27	210.3	209.6	219.9	211.6	210.1	212.2	209.8	210.0	210.3	209.8	209.8	210.8
28	210.2	209.6	220.5	211.6	210.1	212.6	209.8	209.8	210.2	209.8	210.3	210.9
29	210.2	......	219.7	211.6	210.1	212.2	209.8	210.0	209.9	210.0	212.9	211.5
30	210.1	......	219.2	211.6	210.1	211.5	209.8	209.8	209.8	209.8	213.8	211.8
31	210.1	......	220.7	......	210.1	......	209.8	210.1	......	209.8	......	211.5

* Staff gage at Scotia bridge, Washington street.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River at Schenectady, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	211.4	210.5	211.2	213.6	210.3	210.4	210.8	209.7	209.6	209.5	210.3	210.1
2	211.2	210.1	210.7	212.7	210.3	210.0	210.8	209.7	209.4	209.5	210.2	210.3
3	211.2	209.8	210.8	212.4	212.8	210.0	211.8	209.6	209.4	209.5	210.1	210.3
4	211.4	209.8	217.4	212.5	213.0	210.0	211.7	209.6	209.5	209.5	210.0	210.3
5	211.1	209.8	215.8	213.2	212.2	209.8	210.8	209.6	209.3	209.5	210.0	210.3
6	211.0	209.8	213.9	213.4	211.6	209.8	210.4	209.6	209.3	209.4	210.0	211.5
7	210.9	209.8	213.0	213.4	211.1	210.0	210.2	210.0	209.4	209.4	210.0	210.6
8	210.8	209.8	212.2	212.5	210.8	209.8	209.8	210.0	209.4	209.4	210.0	210.5
9	210.6	209.8	211.6	212.0	210.6	210.2	209.4	210.0	209.4	209.4	210.1	210.5
10	210.2	209.8	211.4	212.0	210.6	210.8	209.2	210.0	209.4	209.4	210.1	210.5
11	210.1	209.8	211.1	213.9	210.6	210.6	211.0	209.8	209.4	209.5	210.1	210.5
12	210.0	209.8	210.6	215.5	210.6	210.4	210.4	209.8	209.4	209.6	210.2	210.5
13	210.3	209.8	210.5	215.0	210.6	210.2	209.4	209.4	209.4	209.8	210.2	210.4
14	210.6	209.8	210.3	214.1	210.6	210.4	209.1	209.4	209.3	209.8	210.1	210.3
15	210.5	209.6	210.1	216.4	210.9	210.6	210.0	209.3	209.3	209.8	210.2	210.4
16	210.5	209.6	209.8	218.9	210.6	210.6	210.0	209.3	209.3	209.5	210.1	210.4
17	210.4	209.6	209.8	216.4	210.5	210.9	209.9	209.3	209.2	209.3	210.1	210.4
18	210.4	209.6	209.8	215.0	210.5	211.9	209.8	209.2	209.2	209.3	210.4	210.4
19	210.3	209.6	209.8	214.2	210.4	211.5	209.8	209.2	209.2	209.6	212.4	210.4
20	210.3	209.8	209.8	213.8	210.4	211.6	209.6	209.2	209.2	210.0	214.1	210.4
21	210.3	209.8	209.8	213.5	210.4	211.8	209.6	209.3	209.2	210.4	214.7	210.7
22	211.8	214.3	209.6	213.4	210.4	211.6	209.6	209.4	209.4	210.4	214.0	210.7
23	215.8	218.6	209.6	213.3	210.2	211.4	209.4	209.6	209.4	210.3	212.6	210.2
24	217.2	216.2	209.6	212.7	210.2	210.5	209.4	209.6	209.4	210.3	211.5	210.2
25	215.7	215.8	209.6	212.0	210.2	210.2	209.4	209.5	209.4	210.3	211.3	210.2
26	213.6	216.2	209.6	211.4	210.2	210.2	209.3	209.4	209.3	210.2	211.3	210.2
27	212.0	214.8	209.7	211.2	210.2	210.0	209.3	209.4	209.4	210.3	210.8	210.2
28	211.0	212.8	218.2	210.8	214.1	210.0	209.2	209.5	209.5	210.3	210.7	210.3
29	211.2	....	216.2	210.4	212.7	209.8	209.3	209.5	209.5	210.2	210.3	210.4
30	210.8	...	215.4	210.3	211.8	209.8	209.5	209.6	209.5	210.2	210.2	210.4
31	210.6	.....	215.8	......	211.0	......	209.6	209.6	......	210.2	......	210.5

MOHAWK RIVER AT TRIBES HILL, N. Y.

This gaging station, which is located at the suspension bridge over the Mohawk river between Fort Hunter and Tribes Hill, was established April 3, 1904, by E. A. Lamb of this Department in co-operation with the U. S. Weather Bureau. The gage is a vertical board attached to the down-stream end of the north abutment of the suspension bridge. It is graduated in feet and tenths and the elevation of zero is 267.71, Barge canal datum.

The elevation of bench mark, marked "U. S. Weather Bureau Tablet No. 13," set in second course of the northeast anchorage of this bridge, is 295.021, referred to the same datum. Observations of the stage of the stream are taken twice each day by S. S. Fonda, station agent at Tribes Hill.

Current meter measurements are taken from the down-stream side of the suspension bridge, which is 535.6 feet long between abutments. The channel of the river is straight for some distance each way from the bridge, and the cross-section directly under the bridge and below the bridge is quite uniform. About 300 feet above the bridge rapids are formed during low water, the river being shallow and having a rough and stony bed.

This gaging station is located about 1,000 feet below the junction of the Mohawk river and Schoharie creek, and the record here will show the combined discharge of these streams.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River at Tribes Hill, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	273.2	269.0	267.6	267.9	268.3	271.9	268.6	268.9
2	......	......	......	......	272.8	268.9	267.8	268.0	268.6	271.6	268.2	268.7
3	......	......	......	274.6	272.2	268.6	267.8	267.9	268.8	270.1	268.0	268.7
4	......	......	......	274.2	271.9	268.3	267.9	267.7	269.2	269.5	267.9	268.7
5	......	......	......	272.9	271.6	268.4	267.7	267.6	269.2	269.2	268.7	268.7
6	......	......	......	273.4	271.9	268.8	267.6	267.6	269.2	269.3	268.3	268.7
7	......	......	......	273.9	270.8	268.9	267.6	267.6	269.1	269.2	268.3	268.7
8	......	......	......	273.8	270.7	269.1	267.6	267.6	268.8	268.4	268.2	268.7
9	......	......	......	273.8	270.4	270.6	267.6	267.6	268.9	268.3	268.2	268.7
10	......	......	......	273.2	269.8	272.1	267.8	267.5	268.8	268.9	268.2	268.7
11	......	......	......	273.3	269.5	270.7	267.7	267.5	268.7	269.5	268.1	268.7
12	......	......	......	273.0	269.2	269.6	267.7	267.5	268.3	271.3	268.1	268.4
13	......	......	......	272.2	269.1	269.3	267.6	267.5	267.9	271.0	268.1	268.4
14	......	......	......	271.5	268.8	269.0	267.6	267.6	267.6	270.2	268.2	268.4
15	......	......	......	271.9	269.3	268.8	267.6	267.6	267.7	269.6	268.2	268.4
16	......	......	......	272.1	269.8	268.7	267.4	267.5	268.0	269.1	268.1	268.4
17	......	......	......	272.1	270.0	268.6	267.5	267.5	267.8	269.0	268.2	268.4
18	......	......	......	271.9	269.9	268.4	267.5	267.7	267.8	268.9	268.1	268.4
19	......	......	......	271.8	269.8	268.2	267.5	267.6	267.8	268.9	268.0	268.4
20	......	......	......	271.7	270.5	267.9	267.5	268.0	267.8	268.9	268.1	268.4
21	......	......	......	269.8	270.6	267.8	267.5	271.2	267.9	271.2	268.4	268.4
22	......	......	......	269.8	269.5	267.8	267.5	271.4	268.5	278.7	269.2	268.7
23	......	......	......	269.8	269.4	267.7	267.6	271.8	268.9	275.1	268.7	268.7
24	......	......	......	269.7	269.3	267.6	267.7	270.9	269.2	273.2	268.7	268.7
25	......	......	......	270.9	269.3	267.6	267.6	269.8	269.4	269.9	268.7	268.7
26	......	......	......	271.8	269.3	267.6	267.7	269.8	270.3	269.9	268.6	268.7
27	......	......	......	272.4	269.4	267.6	267.7	269.6	270.4	269.7	268.5	268.8
28	......	......	......	273.2	269.8	267.6	267.6	269.5	270.1	269.4	268.5	273.7
29	......	......	......	273.8	269.6	267.6	267.8	269.3	269.4	269.3	268.6	272.0
30	......	......	......	273.4	269.2	267.7	267.6	269.2	269.9	269.1	268.7	270.8
31	......	......	......	......	269.1	......	267.8	269.1	......	268.8	......	270.7

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River at Tribes Hill, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	270.7	269.9	270.0	275.5	270.5	267.3	268.6	269.5	268.7	268.2	268.7	271.4
2	270.7	270.1	269.9	275.5	270.3	267.4	267.9	268.9	268.5	268.1	269.7	269.8
3	271.5	270.1	269.9	274.5	270.7	267.5	269.4	268.4	270.0	268.4	269.5	273.4
4	271.6	270.0	269.9	274.0	270.8	267.7	271.8	268.2	273.2	268.7	269.3	274.5
5	270.7	269.1	269.7	272.2	270.7	267.8	270.6	268.1	274.0	268.6	269.3	272.2
6	270.7	269.7	269.9	273.5	271.0	267.9	270.0	268.3	273.1	268.4	269.3	271.2
7	270.7	269.1	269.9	272.0	269.8	268.1	269.5	268.9	271.5	268.2	269.6	270.7
8	271.5	269.7	270.1	271.6	269.5	268.3	268.7	269.1	270.6	267.9	270.4	270.1
9	271.8	269.7	270.0	271.7	269.5	268.8	268.7	268.4	269.6	267.9	270.2	269.7
10	271.0	269.7	269.9	271.3	269.6	269.4	268.7	268.1	269.2	267.7	269.6	269.4
11	270.3	269.7	269.9	271.3	269.4	269.3	268.2	268.0	268.7	267.8	269.3	269.4
12	270.3	269.7	269.9	271.9	269.2	269.3	268.3	268.0	268.8	269.3	269.1	268.7
13	272.0	269.7	270.0	272.9	268.7	269.2	268.5	268.5	269.4	270.4	269.1	268.7
14	271.7	269.7	270.1	271.8	268.7	268.9	268.3	268.9	269.3	270.4	269.1	268.7
15	271.7	269.7	270.1	271.5	268.4	268.7	269.0	269.1	268.7	269.8	268.9	268.7
16	271.7	269.7	270.1	271.2	269.0	268.3	268.8	270.5	268.6	269.1	268.8	268.7
17	271.7	269.7	270.4	270.8	268.7	268.2	268.2	270.5	268.7	268.7	268.7	268.7
18	271.7	269.9	270.3	270.0	268.7	268.3	268.2	270.0	269.5	268.5	268.7	268.7
19	271.7	269.9	279.7	269.6	268.6	268.7	268.2	269.0	271.0	268.7	268.7	268.2
20	271.2	270.0	278.2	269.7	268.6	269.6	268.7	268.5	270.7	270.4	268.7	268.7
21	270.8	270.0	276.8	269.7	268.7	269.8	268.5	268.2	270.6	270.5	268.4	269.1
22	270.7	270.0	276.2	270.3	268.7	270.9	268.2	268.0	270.1	270.2	268.3	271.1
23	271.2	270.0	276.2	270.5	268.7	272.1	268.2	268.0	269.4	269.4	268.2	270.6
24	270.7	270.0	275.7	270.7	268.1	271.0	268.2	267.9	269.0	269.2	268.2	270.0
25	270.7	270.0	275.1	270.0	268.2	270.2	268.2	267.7	268.7	268.9	268.3	269.8
26	270.7	270.0	276.5	269.9	268.2	270.4	268.2	267.7	268.7	268.7	268.7	269.2
27	270.7	270.0	277.0	269.7	267.6	270.7	268.2	267.7	268.5	268.7	268.6	268.7

This gaging station is [illegible] tion of the Mohawk river [illegible] will show the combined [illegible]

Mean Daily Elevation of [illegible]

DAY.	Jan.	Feb.	[illegible]
1904.			
1	.....		
2	.....		
3	.....		
4	.....		
5	.....		
6	.....		
7	....		
8	...		
9	....		
10	....		
11	....		
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			[illegible]
25			[illegible]
26			[illegible]
27	.....		[illegible]
28	.....	...	[illegible]
29	.....	...	6,349
30	.....	....	6,253
31	.....	....	

Mean Daily Elevation of Water [illegible]

DAY.	Jan.	Feb.	March
1905.			
1	270.7	[illegible]	[illegible]
2	270.7	[illegible]	[illegible]
3	271.5	[illegible]	[illegible]
4	271.6	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]

[illegible] precipitous. [illegible] ts. [illegible] ain by slaty rocks, [illegible] depth. The valley [illegible] disintegration of the [illegible] toward the mouth, [illegible] the Devonian sedimentary [illegible] Ithaca and Hamilton for- [illegible] considered fairly impervious and [illegible] belts of Silurian formations, [illegible] Niagara and Medina sandstone and [illegible] underlaid by impervious Hudson [illegible] selves permeable, yielding numerous [illegible] gs.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River at Tribe Hill, N. Y.—Concluded.

DAY.	Jan.	Feb.	March	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1095.												
28	270.7	270.0	276.2	269.7	267.7	270.9	268.2	267.7	268.2	268.5	268.6	268.9
29	270.7	....	276.5	269.9	267.5	270.7	268.2	267.7	268.2	268.5	268.6	269.0
30	270.7	......	275.5	270.8	267.5	270.7	267.8	267.8	268.2	268.3	271.6	270.2
31	270.7	......	275.7	.....	267.2	......	268.3	268.4	......	268.2	......	270.0

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River at Tribes Hill, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	269.81	269.06	269.71	271.61	269.2	269.1	268.5	268.2	268.0	267.7	268.3	269.3
2	269.16	268.81	269.61	270.96	269.3	268.7	269.6	268.0	267.9	267.7	268.3	269.0
3	268.86	268.71	269.56	270.51	271.3	268.4	269.5	267.7	267.7	267.5	268.1	268.7
4	268.96	268.71	274.06	270.5	271.3	268.3	269.2	267.7	267.7	267.5	268.3	268.7
5	269.71	268.71	271.21	271.3	270.8	268.2	269.2	267.9	267.7	267.4	267.9	268.7
6	269.71	268.71	270.61	271.6	270.1	268.3	268.7	268.2	267.5	267.4	268.0	268.7
7	269.21	268.71	270.51	271.3	269.7	268.4	268.4	268.2	267.5	267.5	268.1	268.7
8	269.21	268.71	269.61	270.7	269.5	268.3	268.2	268.1	267.5	267.6	267.9	268.7
9	268.71	268.71	269.31	270.2	269.1	268.2	268.0	268.1	267.3	267.7	267.7	269.7
10	268.71	268.71	269.26	270.5	269.3	269.2	268.0	267.9	267.3	268.1	267.7	269.7
11	268.71	268.61	269.21	272.2	269.2	269.1	268.8	267.7	267.3	268.2	267.9	269.5
12	268.96	268.61	269.01	272.7	269.1	268.7	269.2	267.6	267.1	268.3	268.2	269.3
13	269.21	268.86	268.91	272.1	268.7	268.6	268.3	267.5	267.1	268.2	268.3	269.1
14	269.21	268.71	268.71	272.8	268.7	268.2	268.1	267.5	267.1	267.9	268.5	269.2
15	269.21	268.71	268.71	274.2	268.7	268.2	267.9	267.5	267.1	268.1	268.3	268.9
16	269.21	268.71	268.71	275.0	268.9	268.2	267.7	267.3	267.1	268.0	268.2	271.0
17	269.21	268.71	268.71	273.3	268.7	269.3	267.6	267.1	267.1	267.9	268.7	270.7
18	269.21	268.71	268.61	272.7	268.7	270.1	267.7	267.1	267.1	267.7	268.6	270.8
19	268.71	268.71	268.31	272.2	268.7	269.7	267.7	267.3	267.1	267.7	269.3	270.7
20	268.91	268.71	268.21	271.7	268.7	268.9	267.6	267.3	267.1	267.9	271.5	270.7
21	268.91	268.71	268.31	271.6	268.4	268.6	267.5	267.3	267.1	268.1	270.9	270.7
22	270.61	272.26	268.31	271.6	268.2	268.3	267.5	267.5	267.3	268.2	270.9	270.7
23	272.51	271.71	268.31	271.6	268.1	268.6	267.5	267.6	267.7	268.3	270.1	270.5
24	274.21	270.61	268.31	270.8	268.1	268.5	267.5	267.7	267.9	268.2	269.7	269.7
25	272.96	......	268.31	270.4	268.2	268.3	267.5	267.7	267.9	268.1	269.5	269.7
26	271.41	......	268.06	269.7	268.1	268.2	267.5	267.7	267.7	268.1	269.2	269.7
27	270.71	......	269.71	269.5	270.7	268.2	267.5	267.9	267.9	268.1	269.2	269.7
28	269.96	......	271.56	269.3	271.9	268.0	267.5	267.9	268.0	268.4	269.3	269.7
29	269.41	......	273.21	269.3	271.9	268.0	267.7	268.1	268.1	268.4	269.7	268.7
30	268.81	......	272.46	269.2	270.7	267.9	267.6	268.3	268.1	268.3	269.4	268.7
31	268.81	......	273.21	.....	269.4	.....	267.9	268.3	.....	268.3	......	269.7

Current Meter Discharge Measurements of Mohawk River at Tribes Hill, N. Y.

DATE.	Hydrographer.	Gage height.	Elevation of water-surface.	Width.	Area of section.	Mean velocity.	Discharge.
		Feet.		*Feet.*	*Square feet.*	*Ft. per second.*	*Second-feet.*
1905.							
Aug. 26	C. A. Poole	0.1	267.8	528.6	1,816	0.71	1,287
Sept. 6	C. A. Poole	5.5	273.2	530.2	4,675	5.62	26,268
Sept. 28	C. A. Poole	0.6	268.3	528.8	2,080	1.31	2,723
Sept. 28	C. A. Poole	0.6	268.3	528.8	2,080	1.22	2,548
Oct. 13	C. A. Poole	2.7	270.4	529.4	3,191	2.84	9,065
Nov. 11	C. A. Poole	1.7	269.4	529.1	2,662	1.98	5,259
1906.							
April 3	C. A. Poole	2.5	270.2	528.6	3,087	2.98	9,197
April 4	C. A. Poole	2.8	270.5	528.6	3,240	3.31	10,715
April 12	C. A. Poole	4.85	272.56	528.6	4,303	5.85	24,977
April 13	C. A. Poole	4.4	272.1	528.6	4,133	4.92	20,334
April 16	L. R. Ellis	6.7	274.4	516.5	5,198	8.02	41,721
April 17	L. R. Ellis	5.5	273.2	516.5	4,584	6.46	29,593
April 19	C. A. Poole	4.25	271.96	528.6	4,059	4.78	19,412
May 1	C. A. Poole	1.7	269.4	528.6	2,681	2.23	5,982

SCHOHARIE CREEK DRAINAGE BASIN.

DESCRIPTION OF BASIN.

The source of Schoharie creek is about two miles east of Tannersville, at an elevation of 1,940 feet. The source is within about four miles of the easterly escarpment of the Catskill plateau. The stream valley is broad and the slope moderate throughout the upper regions. A small area, which apparently was formerly tributary to Schoharie creek, has been cut off by erosion and has thus become tributary to Kaaterskill. Numerous possible sites for storage reservoirs exist in the upper Schoharie basin and the elevations and capacities of some of these, as determined by the New York Water-Supply Commission of 1903, are shown in the following table:

LOCATION.	Elevation of flow-line.	Capacity. Millions of gallons.
Prattsville	1,240	2,398
Windham	1,500	13,023
Ashland	1,450	5,378
Lexington	1,385	8,477
West Kill	1,485	3,498
Jewett Center	1,435	5,578
Plaat Clove	1,930	5,635
Beaches Corners	1,800	6,349
East Jewett	1,875	6,253

Nearly the entire drainage basin is irregular and precipitous. It is extensively covered with second-growth forests.

The basin of Schoharie creek is largely overlain by slaty rocks, into which water percolates only to a slight depth. The valley soil is largely thin plastic clay, formed by disintegration of the native rocks. Passing from the head waters toward the mouth, Schoharie creek crosses successively the Devonian sedimentary rocks, chiefly of the Catskill, Oneonta, Ithaca and Hamilton formations. All of these may be considered fairly impervious and free from fissures. It then crosses belts of Silurian formations, including Helderberg, Saline, Niagara and Medina sandstone and limestone. These rocks are underlaid by impervious Hudson river shales, but are themselves permeable, yielding numerous springs at the lower partings.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Schoharie Creek at Fort Hunter, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	281.9	282.0	282.5	283.5	281.6	282.2	282.1	279.7	281.4	280.5	281.6	282.0
2	281.8	282.0	282.4	283.3	281.6	282.2	282.0	279.7	280.9	279.7	281.6	282.5
3	281.7	282.0	282.1	283.2	282.8	282.0	281.8	279.7	280.9	279.3	281.5	282.3
4	281.8	282.0	285.9	283.1	282.4	281.9	281.8	279.7	281.1	279.3	281.5	282.3
5	282.2	282.0	283.6	283.2	282.2	281.8	281.9	279.5	280.4	279.3	281.4	282.1
6	282.0	282.0	283.2	283.8	282.0	282.0	281.8	280.2	280.5	279.3	281.3	282.1
7	282.0	282.0	282.9	283.5	281.7	282.0	281.6	281.1	280.1	279.7	281.3	283.3
8	281.8	282.0	282.8	283.5	281.7	281.8	281.5	280.9	279.9	279.1	281.3	282.9
9	281.9	282.0	282.5	283.5	281.7	281.8	281.5	281.4	279.7	279.1	281.5	282.4
10	281.9	282.0	282.5	283.5	281.8	281.9	281.4	281.3	279.7	279.3	281.3	282.1
11	282.0	282.0	282.5	284.0	281.8	282.2	281.4	280.9	279.7	279.7	281.3	282.0
12	282.0	282.0	282.4	284.2	281.7	281.9	281.4	280.3	279.3	279.0	281.4	282.0
13	282.1	282.0	282.3	283.8	281.6	281.8	281.4	280.2	279.3	279.3	281.4	282.6
14	282.2	282.0	282.3	283.6	281.6	281.7	281.2	279.7	279.5	279.3	281.4	282.9
15	282.2	282.0	282.3	284.2	281.6	281.6	280.9	279.6	279.3	279.3	281.4	283.1
16	282.1	282.0	282.3	284.8	281.6	282.0	280.7	279.3	279.3	279.7	281.1	284.0
17	282.2	282.0	282.3	283.8	281.6	283.1	280.4	279.5	279.2	279.5	281.5	283.3
18	282.2	282.0	282.3	283.2	281.6	282.9	280.4	279.1	279.2	279.3	282.0	282.8
19	282.1	282.0	282.2	283.2	281.6	282.8	280.7	279.1	279.2	279.5	284.3	282.3
20	282.1	282.0	282.2	283.0	281.6	282.4	280.9	279.3	278.9	280.0	283.1	282.2
21	282.3	282.3	282.2	283.0	281.6	282.2	280.5	279.5	278.7	281.3	282.9	282.4
22	283.3	283.7	282.2	282.8	281.6	282.0	280.1	279.5	280.6	281.9	285.0	283.0
23	283.3	283.8	282.2	282.6	281.4	282.0	280.1	279.3	279.8	281.7	282.7	282.9
24	283.6	283.4	282.2	282.5	281.5	282.0	280.0	281.2	279.1	281.6	282.3	282.7
25	282.8	282.8	282.2	282.4	281.4	281.8	279.9	280.7	280.6	281.5	282.1	282.5
26	282.4	282.9	282.2	282.2	281.4	281.8	280.0	280.0	280.5	281.7	282.0	282.7
27	282.6	282.6	283.6	282.0	282.0	281.6	280.1	280.5	280.4	281.7	282.0	282.8
28	282.2	282.5	284.9	281.8	283.6	281.6	279.7	281.3	279.3	281.7	282.0	282.9
29	282.4	......	283.4	281.8	283.9	281.5	280.4	281.8	279.9	281.7	282.0	282.9
30	282.4	......	283.4	281.6	283.0	281.6	280.7	281.5	279.6	281.5	282.0	283.0
31	282.1	......	284.0	......	282.4	......	280.0	281.5	......	281.5	......	283.3

Current Meter Discharge Measurements of Erie Canal Feeder, on Schoharie Creek, at For Hunter, N. Y.

DATE.	Width.	Area of section.	Mean velocity.	Discharge.
1905.	*Feet.*	*Square feet.*	*Ft. per second*	*Second-feet.*
August 30	17.8	78	1.83	143
September 6	34.5	93	3.30	307
September 28	37.0	141	0.48	68

SCHOHARIE CREEK AT SCHOHARIE JUNCTION, N. Y.

Observations have been taken twice each day from a gage attached to the south wing of the east abutment of the D. and H. R. R. bridge over Schoharie creek. The readings were begun April 3, 1904.

The gage zero is at elevation 586.316. Minus readings frequently occur, which must be subtracted from the elevation of the gage datum to determine the elevation of the water-surface.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Schoharie Creek at Schoharie Junction, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	....	......	......	......	571.0	568.4	567.8	567.6	567.6	569.7	568.1	568.6
2	....	......	......	......	570.4	568.5	567.8	567.6	567.6	570.4	568.0	568.2
3	....	......	......	569.8	570.1	568.6	567.8	567.6	567.6	567.7	568.0	568.2
4	....	......	......	569.8	569.7	568.8	567.8	567.6	567.6	567.6	567.9	568.4
5	....	......	......	569.8	569.4	568.2	567.8	567.6	567.6	567.6	567.8	568.4
6	....	......	......	569.8	569.2	568.8	567.8	567.6	567.6	567.6	567.8	568.2
7	....	......	......	569.8	569.0	569.0	567.8	567.6	567.6	567.6	567.8	568.3
8	....	......	......	569.8	568.8	569.0	567.7	567.6	567.6	567.6	567.8	568.2
9	....	......	......	570.0	568.6	570.0	567.7	567.6	567.6	567.6	567.7	568.2
10	....	......	......	570.7	568.4	571.0	567.7	567.6	567.6	567.6	567.7	568.3
11	....	......	......	570.4	568.4	570.6	567.7	567.6	567.6	567.6	567.6	568.4
12	....	......	......	571.2	568.3	569.3	567.7	567.6	567.6	567.6	567.7	568.6
13	....	......	......	570.6	568.3	568.5	567.7	567.6	567.6	567.6	567.7	568.6
14	....	......	......	569.6	568.2	568.4	567.7	567.6	567.6	568.2	567.7	568.6
15	....	......	......	569.4	568.2	568.3	567.7	567.6	575.3	567.8	567.7	568.6
16	....	......	......	569.3	570.0	568.3	567.7	567.6	568.2	567.8	567.7	568.7
17	....	......	......	569.6	569.0	568.2	567.7	567.6	567.8	567.7	567.7	568.7
18	....	......	......	569.6	568.5	568.2	567.6	567.6	567.6	567.6	567.7	568.7
19	....	......	......	569.8	568.4	568.2	567.6	567.6	567.6	567.6	567.7	568.7
20	....	......	......	569.6	568.8	568.1	567.6	567.6	567.6	567.6	......	568.6
21	....	......	......	569.4	568.5	567.9	567.6	567.8	567.6	570.0	......	568.6
22	....	......	......	569.0	568.4	567.9	567.6	567.7	567.6	572.3	......	568.4
23	....	......	......	568.8	568.3	567.9	567.6	567.7	567.5	570.4	......	568.4
24	....	......	......	568.8	568.2	567.9	567.6	567.6	567.5	569.4	......	569.3
25	....	......	......	568.8	568.5	567.8	567.6	567.6	567.5	569.2	......	569.2
26	....	......	......	568.8	568.3	567.8	567.6	567.6	567.5	569.0	568.6	568.8
27	....	......	......	568.8	568.3	567.8	567.6	567.6	567.5	568.8	568.5	579.3
28	....	......	......	572.6	568.3	567.8	567.6	567.6	567.5	568.6	568.5	577.3
29	....	......	......	573.0	568.2	567.8	567.8	567.6	567.5	568.6	568.5	572.8
30	....	......	......	571.8	568.4	567.8	567.9	567.6	567.5	568.4	568.5	571.5
31	....	......	......	......	568.3	......	567.7	567.6	......	568.1	......	571.0

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Schoharie Creek at Schoharie Junction, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	570.0	570.0	569.2	......	568.2	567.3	567.7	567.9	568.2	567.6	567.8	569.3
2	569.2	569.9	569.2	570.4	568.1	567.3	567.9	567.7	568.0	567.5	567.9	569.7
3	569.4	569.8	569.2	570.3	567.9	567.3	567.8	567.5	568.3	568.1	567.9	570.5
4	570.7	569.8	569.2	570.2	567.9	567.3	567.7	567.4	568.9	568.2	567.9	570.0
5	572.3	569.8	569.1	570.6	567.9	567.2	567.6	567.3	569.9	567.8	567.7	569.8
6	572.2	569.8	569.0	571.5	567.9	567.3	567.4	567.2	569.0	567.6	567.8	569.6
7	573.3	569.8	568.8	570.9	567.9	567.7	567.5	567.7	568.3	567.5	567.9	569.1
8	576.8	569.7	568.8	569.8	568.0	567.7	567.5	567.6	568.2	567.3	568.0	569.0
9	574.3	569.6	568.9	569.7	568.0	567.6	567.3	567.4	568.1	567.2	567.9	568.9
10	573.4	569.6	569.1	569.7	567.9	567.6	567.2	567.3	568.1	567.3	567.8	568.8
11	572.6	569.8	570.2	570.3	567.8	567.5	568.0	567.2	567.9	568.3	567.7	568.6
12	573.0	569.7	570.3	571.6	567.8	567.4	568.5	567.2	568.1	568.7	567.8	568.5
13	576.8	569.6	570.1	570.5	567.8	567.7	568.0	567.2	568.3	568.9	567.8	568.4
14	574.5	569.5	569.9	570.2	567.8	567.6	567.7	567.1	568.3	568.7	567.8	568.3
15	572.7	569.5	569.9	569.8	568.3	567.5	567.6	567.4	568.3	568.3	567.8	568.4
16	572.4	569.5	569.9	569.8	568.0	567.5	567.5	568.8	568.3	568.1	567.8	568.4
17	571.8	569.4	569.8	569.4	567.9	567.4	567.4	568.6	568.0	567.8	567.8	568.4
18	571.8	......	570.0	569.2	567.8	567.3	567.3	568.1	567.8	567.9	567.8	568.3
19	571.8	......	579.8	569.1	567.9	567.4	567.3	567.8	567.8	568.5	567.8	568.3
20	571.9	......	577.9	569.1	568.0	567.4	567.4	567.6	568.3	568.8	567.7	568.5
21	571.4	......	577.1	569.0	......	567.7	567.3	567.3	569.8	568.6	567.6	569.1
22	571.4	......	574.5	568.9	567.6	575.3	567.3	567.6	569.2	568.3	567.6	568.9
23	571.1	......	573.7	568.9	567.6	571.8	567.2	567.6	568.7	568.1	567.6	569.1
24	570.7	......	571.8	568.7	567.6	569.3	567.3	567.5	568.3	568.0	567.5	568.7
25	570.5	569.3	585.3	568.5	567.5	568.3	567.5	567.4	568.2	567.8	567.5	568.5
26	570.2	569.3	580.7	568.4	567.5	568.5	567.3	567.3	567.9	567.7	567.5	568.3
27	570.0	569.3	578.8	568.2	567.5	568.1	567.2	567.3	567.8	567.7	567.5	568.4
28	570.3	569.3	572.6	568.3	567.5	568.1	567.1	567.3	567.8	567.7	567.4	568.5
29	570.6	......	572.3	568.2	567.4	567.9	567.1	567.5	567.7	567.7	567.6	568.7
30	570.3	......	......	568.3	567.4	567.8	567.6	567.5	567.6	567.8	569.0	568.5
31	570.2	......	......	......	567.3	......	567.9	568.6	......	567.8	......	568.3

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Schoharie Creek at Fort Hunter, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	281.9	282.0	282.5	283.5	281.6	282.2	282.1	279.7	281.4	280.5	281.6	282.0
2	281.8	282.0	282.4	283.3	281.6	282.2	282.0	279.7	280.9	279.7	281.6	282.5
3	281.7	282.0	282.1	283.2	282.8	282.0	281.8	279.7	280.9	279.3	281.5	282.3
4	281.8	282.0	285.9	283.1	282.4	281.9	281.8	279.7	281.1	279.3	281.5	282.3
5	282.2	282.0	283.6	283.2	282.2	281.8	281.9	279.5	280.4	279.3	281.4	282.1
6	282.0	282.0	283.2	283.8	282.0	282.0	281.8	280.2	280.5	279.3	281.3	282.1
7	282.0	282.0	282.9	283.5	281.7	282.0	281.6	281.1	280.1	279.7	281.3	283.3
8	281.8	282.0	282.8	283.5	281.7	281.8	281.5	280.9	279.9	279.1	281.3	282.9
9	281.9	282.0	282.5	283.5	281.7	281.8	281.5	281.4	279.7	279.1	281.5	282.4
10	281.9	282.0	282.5	283.5	281.8	281.9	281.4	281.3	279.7	279.3	281.3	282.1
11	282.0	282.0	282.5	284.0	281.8	282.2	281.4	280.9	279.7	279.7	281.3	282.0
12	282.0	282.0	282.4	284.2	281.7	281.9	281.4	280.3	279.3	279.0	281.4	282.0
13	282.1	282.0	282.3	283.8	281.6	281.8	281.4	280.2	279.3	279.3	281.4	282.6
14	282.2	282.0	282.3	283.6	281.6	281.7	281.2	279.7	279.5	279.3	281.4	282.9
15	282.2	282.0	282.3	284.2	281.6	281.6	280.9	279.6	279.3	279.3	281.4	283.1
16	282.1	282.0	282.3	284.8	281.6	282.0	280.7	279.3	279.3	279.7	281.1	284.0
17	282.2	282.0	282.3	283.8	281.6	283.1	280.4	279.5	279.2	279.5	281.5	283.3
18	282.2	282.0	282.3	283.2	281.6	282.9	280.4	279.1	279.2	279.3	282.0	282.8
19	282.1	282.0	282.2	283.2	281.6	282.8	280.7	279.1	279.2	279.5	284.3	282.3
20	282.1	282.0	282.2	283.0	281.6	282.4	280.9	279.3	278.9	280.0	283.1	282.2
21	282.3	282.3	282.2	283.0	281.6	282.2	280.5	279.5	278.7	281.3	282.9	282.4
22	283.3	283.7	282.2	282.8	281.6	282.0	280.1	279.5	280.6	281.9	285.0	283.0
23	283.3	283.8	282.2	282.6	281.4	282.0	280.1	279.3	279.8	281.7	282.7	282.9
24	283.6	283.4	282.2	282.5	281.5	282.0	280.0	281.2	279.1	281.6	282.3	282.7
25	282.8	282.8	282.2	282.4	281.4	281.8	279.9	280.7	280.6	281.5	282.1	282.5
26	282.4	282.9	282.2	282.2	281.4	281.8	280.0	280.0	280.5	281.7	282.0	282.7
27	282.6	282.6	283.6	282.0	282.0	281.6	280.1	280.5	280.4	281.7	282.0	282.8
28	282.2	282.5	284.9	281.8	283.6	281.6	279.7	281.3	279.3	281.7	282.0	282.9
29	282.4	......	283.4	281.8	283.9	281.5	280.4	281.8	279.9	281.7	282.0	282.9
30	282.4	......	283.4	281.6	283.0	281.6	280.7	281.5	279.6	281.5	282.0	283.0
31	282.1	......	284.0	......	282.4	......	280.0	281.5	......	281.5	......	283.3

Current Meter Discharge Measurements of Erie Canal Feeder, on Schoharie Creek, at For Hunter, N. Y.

DATE.	Width.	Area of section.	Mean velocity.	Discharge.
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The gage zero is at elevation 586.316. Minus readings frequently occur, which must be subtracted from the elevation of the gage datum to determine the elevation of the water-surface.

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DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	....	......	......	......	571.0	568.4	567.8	567.6	567.6	569.7	568.1	568.6
2	....	......	......	......	570.4	568.5	567.8	567.6	567.6	570.4	568.0	568.2
3	....	......	......	569.8	570.1	568.6	567.8	567.6	567.6	567.7	568.0	568.2
4	....	......	......	569.8	569.7	568.8	567.8	567.6	567.6	567.6	567.9	568.4
5	....	......	......	569.8	569.4	568.2	567.8	567.6	567.6	567.6	567.8	568.4
6	....	......	......	569.8	569.2	568.8	567.8	567.6	567.6	567.6	567.8	568.2
7	....	......	......	569.8	569.0	569.0	567.8	567.6	567.6	567.6	567.8	568.3
8	....	......	......	569.8	568.8	569.0	567.7	567.6	567.6	567.6	567.8	568.2
9	....	......	......	570.0	568.6	570.0	567.7	567.6	567.6	567.6	567.7	568.2
10	....	......	......	570.7	568.4	571.0	567.7	567.6	567.6	567.6	567.7	568.3
11	....	......	......	570.4	568.4	570.6	567.7	567.6	567.6	567.6	567.6	568.4
12	....	......	......	571.2	568.3	569.3	567.7	567.6	567.6	567.6	567.7	568.6
13	....	......	......	570.6	568.3	568.5	567.7	567.6	567.6	567.6	567.7	568.6
14	....	......	......	569.6	568.2	568.4	567.7	567.6	567.6	568.2	567.7	568.6
15	....	......	......	569.4	568.2	568.3	567.7	567.6	575.3	567.8	567.7	568.6
16	....	......	......	569.3	570.0	568.3	567.7	567.6	568.2	567.8	567.7	568.7
17	....	......	......	569.6	569.0	568.2	567.7	567.6	567.8	567.7	567.7	568.7
18	....	......	......	569.6	568.5	568.2	567.6	567.6	567.6	567.6	567.7	568.7
19	....	......	......	569.8	568.4	568.2	567.6	567.6	567.6	567.6	567.7	568.7
20	....	......	......	569.6	568.8	568.1	567.6	567.6	567.6	567.6	......	568.6
21	....	......	......	569.4	568.5	567.9	567.6	567.8	567.6	570.0	......	568.6
22	....	......	......	569.0	568.4	567.9	567.6	567.7	567.6	572.3	......	568.4
23	....	......	......	568.8	568.3	567.9	567.6	567.7	567.5	570.4	......	568.4
24	....	......	......	568.8	568.2	567.9	567.6	567.6	567.5	569.4	......	569.3
25	....	......	......	568.8	568.5	567.8	567.6	567.6	567.5	569.2	......	569.2
26	....	......	......	568.8	568.3	567.8	567.6	567.6	567.5	569.0	568.6	568.8
27	....	......	......	568.8	568.3	567.8	567.6	567.6	567.5	568.8	568.5	579.3
28	....	......	......	572.6	568.3	567.8	567.6	567.6	567.5	568.6	568.5	577.3
29	....	......	......	573.0	568.2	567.8	567.8	567.6	567.5	568.6	568.5	572.8
30	....	......	......	571.8	568.4	567.8	567.9	567.6	567.5	568.4	568.5	571.5
31	....	......	......	......	568.3	......	567.7	567.6	......	568.1	......	571.0

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Schoharie Creek at Schoharie Junction, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	570.0	570.0	569.2	......	568.2	567.3	567.7	567.9	568.2	567.6	567.8	569.3
2	569.2	569.9	569.2	570.4	568.1	567.3	567.9	567.7	568.0	567.5	567.9	569.7
3	569.4	569.8	569.2	570.3	567.9	567.3	567.8	567.5	568.3	568.1	567.9	570.5
4	570.7	569.8	569.2	570.2	567.9	567.3	567.7	567.4	568.9	568.2	567.9	570.0
5	572.3	569.8	569.1	570.6	567.9	567.2	567.6	567.3	569.9	567.8	567.7	569.8
6	572.2	569.8	569.0	571.5	567.9	567.3	567.4	567.2	569.0	567.6	567.8	569.6
7	573.3	569.8	568.8	570.9	567.9	567.7	567.5	567.7	568.3	567.5	567.9	569.1
8	576.8	569.7	568.8	569.8	568.0	567.7	567.5	567.6	568.2	567.3	568.0	569.0
9	574.3	569.6	568.9	569.7	568.0	567.6	567.3	567.4	568.1	567.2	567.9	568.9
10	573.4	569.6	569.1	569.7	567.9	567.6	567.2	567.3	568.1	567.3	567.8	568.8
11	572.6	569.8	570.2	570.3	567.8	567.5	568.0	567.2	567.9	568.3	567.7	568.6
12	573.0	569.7	570.3	571.6	567.8	567.4	568.5	567.2	568.1	568.7	567.8	568.5
13	576.8	569.6	570.1	570.5	567.8	567.7	568.0	567.2	568.3	568.9	567.8	568.4
14	574.5	569.5	569.9	570.2	567.8	567.6	567.7	567.1	568.3	568.7	567.8	568.3
15	572.7	569.5	569.9	569.8	568.3	567.5	567.6	567.4	568.3	568.3	567.8	568.4
16	572.4	569.5	569.9	569.8	568.0	567.5	567.5	568.8	568.3	568.1	567.8	568.4
17	571.8	569.4	569.8	569.4	567.9	567.4	567.4	568.6	568.0	567.8	567.8	568.4
18	571.8	......	570.0	569.2	567.8	567.3	567.3	568.1	567.8	567.9	567.8	568.3
19	571.8	......	579.8	569.1	567.9	567.4	567.3	567.8	567.8	568.5	567.8	568.3
20	571.9	......	577.9	569.1	568.0	567.4	567.4	567.6	568.3	568.8	567.7	568.5
21	571.4	......	577.1	569.0	......	567.7	567.3	567.3	569.8	568.6	567.6	569.1
22	571.4	......	574.5	568.9	567.6	575.3	567.3	567.6	569.2	568.3	567.6	568.9
23	571.1	......	573.7	568.9	567.6	571.8	567.2	567.6	568.7	568.1	567.6	569.1
24	570.7	......	571.8	568.7	567.6	569.3	567.3	567.5	568.3	568.0	567.5	568.7
25	570.5	569.3	585.3	568.5	567.5	568.3	567.5	567.4	568.2	567.8	567.5	568.5
26	570.2	569.3	580.7	568.4	567.5	568.5	567.3	567.3	567.9	567.7	567.5	568.3
27	570.0	569.3	578.8	568.2	567.5	568.1	567.2	567.3	567.8	567.7	567.5	568.4
28	570.3	569.3	572.6	568.3	567.5	568.1	567.1	567.3	567.8	567.7	567.4	568.5
29	570.6	......	572.3	568.2	567.4	567.9	567.1	567.5	567.7	567.7	567.6	568.7
30	570.3	......	......	568.3	567.4	567.8	567.6	567.5	567.6	567.8	569.0	568.5
31	570.2	......	......	......	567.3	......	567.9	568.6	......	567.8	......	568.3

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Schoharie Creek at Schoharie Junction, N. Y.

DAY.	Jan.	Feb.	March.	April.	May	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	568.4	568.6	569.5	570.8	569.8	569.9	570.6	569.7	568.3	......	......	......
2	568.3	568.5	569.6	569.7	569.8	569.7	570.4	568.3	569.8	......	......	......
3	568.4	568.3	571.3	569.5	571.5	569.4	570.2	568.2	569.8	......	......	......
4	569.2	568.4	577.1	570.6	570.6	568.4	569.9	568.5	569.8	......	......	......
5	568.8	568.5	573.3	572.0	569.2	568.5	569.3	567.8	569.8	......	......	......
6	568.4	568.6	571.8	571.5	569.3	570.0	568.9	567.6	569.7	......	......	......
7	568.4	568.8	570.3	570.4	569.2	569.6	568.7	567.7	569.7	570.0	......	......
8	568.3	568.9	569.3	570.5	568.8	569.4	568.6	568.4	569.7	570.0	......	......
9	568.3	569.0	569.2	572.0	569.7	570.1	569.6	568.2	569.6	570.0	......	......
10	568.6	568.9	569.0	571.5	569.3	570.2	570.2	568.0	569.7	569.9	......	......
11	568.8	568.9	568.8	572.8	568.7	569.8	569.9	567.7	569.9	570.0	......	......
12	569.0	568.8	568.7	572.6	568.5	569.6	569.7	568.3	570.0	570.0	......	......
13	569.3	568.7	568.6	572.2	568.4	569.3	569.1	568.3	570.1	570.0	......	......
14	569.8	568.8	568.3	570.0	568.3	569.0	569.0	568.3	570.1	566.5	......	......
15	569.6	568.8	568.2	571.8	568.4	568.7	568.5	568.4	570.1	566.5	......	......
16	569.3	568.8	568.2	574.5	568.5	570.8	568.3	568.3	570.1	566.5	......	......
17	569.4	568.8	568.2	572.3	568.6	572.7	568.0	568.3	570.1	566.5	......	......
18	569.6	568.8	568.1	571.6	568.3	573.1	567.8	568.4	570.1	566.5	......	......
19	569.8	568.7	568.0	571.3	568.4	571.0	567.5	567.9	570.1	566.8	......	......
20	570.4	568.8	568.0	571.0	568.2	570.4	567.3	567.7	570.0	567.5	......	......
21	571.4	569.4	568.0	570.5	568.1	569.5	567.0	567.7	569.8	569.5	......	......
22	570.2	571.4	568.0	570.3	567.9	569.2	......	567.6	569.5	568.8	......	......
23	570.0	570.4	567.9	570.0	567.6	569.8	......	567.4	......	568.8	......	......
24	571.3	570.5	567.8	569.7	567.5	569.0	......	567.2	......	568.8	......	......
25	569.7	570.4	567.8	569.3	567.3	568.7	......	566.9	......	568.8	......	......
26	569.4	570.3	567.8	569.0	567.3	568.3	......	568.3	......	568.5	......	......
27	569.1	570.0	573.2	568.8	569.3	568.2	......	568.4	......	569.0	......	......
28	569.0	569.7	574.0	568.6	570.6	568.0	......	568.3	......	......	......	......
29	568.8	......	570.8	568.4	572.5	567.7	569.5	568.3	......	......	......	......
30	568.8	......	571.6	570.6	571.1	567.4	569.3	568.4	......	......	......	......
31	568.6	......	572.4	......	570.3	......	569.1	568.3	......	......	......	......

SCHOHARIE CREEK AT MIDDLEBURG, N. Y.

A temporary gaging station was established at Middleburg August 24, 1906, by Robert E. Horton. The gage consists of an enameled steel scale subdivided to hundredths of a foot, which is attached vertically to a pile forming part of the shore protection on the right-hand bank of the stream, about 300 feet below Middleburg bridge. The zero mark of the gage is 27.6 feet below the top of the iron rod at the upper end of the pile. The stream channel is straight for a considerable distance below and above the gage. The bed is of gravel and cobblestones fairly smooth and permanent. The stream is confined near the right bank during the low water and measurements are made by boat or by wading opposite the gage. At ordinary high stages the stream can be measured from the Middleburg bridge. Gage readings are taken each morning and night by Minnie Wheeler.

Miscellaneous Discharge Measurements, Made in Schoharie Creek Drainage Basin, by E. C. Niles[*] and C. C. Covert.

DATE.	Stream.	Locality.	Width.	Area of section.	Gage height.	Discharge.
1906.			*Feet.*	*Square feet.*	*Feet.*	*Second-feet.*
Aug. 23.	Schoharie creek	Middleburg, N. Y.			1.93	249
Aug. 23.	Schoharie creek.	Middleburg, N. Y.			1.55	267
Aug. 25.	Schoharie creek.	Middleburg, N. Y.			1.40	108[†]
Aug. 24.	Schoharie creek.	At first bridge below Schoharie Junction			[‡]	195
Aug. 22.	Fox creek	Near junction with Schoharie creek				57
Aug. 23.	Fox creek	Near junction with Schoharie creek				62
Aug. 25.	Fox creek	Near junction with Schoharie creek				46
Sept. 7.	Schoharie creek.	Middleburg, N. Y.	90	140	1.30	78
Sept. 7.	Schoharie creek.	Middleburg, N. Y.	90	141	1.28	74

Mean Daily Gage Height, in Feet, of Schoharie Creek at Middleburg, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1									1.58	1.28	2.1	2.95
2									1.47	1.25	2.0	2.42
3									1.42	1.22	1.9	2.33
4									1.5	1.18	1.85	2.55
5									1.4	1.15	1.8	2.55
6									1.35	1.15	1.78	2.95
7									1.3	1.15	1.73	3.65
8									1.25	1.15	1.7	4.5
9									1.2	1.15	1.68	4.78
10									1.2	1.15	1.62	5.0
11									1.15	1.2	1.65	5.12
12									1.28	1.25	1.75	3.88
13									1.3	1.25	1.8	3.7
14									1.22	1.2	1.75	3.48
15									1.15	1.2	1.7	3.28
16									1.1	1.15	1.68	3.8
17									1.1	1.15	1.73	3.15
18									1.05	1.12	2.72	2.78
19									1.05	1.1	5.35	2.28
20									1.02	1.95	4.12	2.28
21									1.05	2.85	3.95	2.78
22									1.15	2.58	3.9	2.95
23									1.85	2.3	3.48	2.53
24								1.48	1.58	2.08	3.2	2.33
25								1.38	1.38	2.0	2.98	2.0
26								1.28	1.28	3.0	2.88	2.23
27								1.32	1.25	2.48	2.8	2.33
28								2.88	1.2	2.32	2.8	2.25
29								2.1	1.18	2.22	2.62	2.2
30								1.82	1.2	2.12	2.4	2.2
31								1.68		2.15		2.7

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[*] New York State Barge canal department.

[†] Doubtful; meter may have been out of order.

[‡] Water-surface 27.6 feet below top of iron bars, right-hand end of bridge, down-stream side.

SCHOHARIE CREEK AT PRATTSVILLE, N. Y.

Schoharie creek above Prattsville drains a rugged, mountainous area, almost entirely wooded. The watershed, 238 square miles in extent, lies wholly within Greene county. Rocks of the Catskill formation, chiefly sandstones and conglomerates, lie at or near the surface over most of the area. The basin is surrounded by nearly continuous mountain ranges, and intervening ridges divide the main stream from its principal tributaries — Batavia kill, East kill and West kill.

A gaging station was established November 7, 1902, at the highway bridge in the village of Prattville, by Robert E. Horton for the U. S. Geological Survey, by which it has since been maintained in co-operation with this Department.

The bridge has a single span of 185 feet. In extreme low water the current underneath the bridge is sluggish, and meter measurements are made by fording the stream a short distance below the bridge.

A standard chain gage is attached to the steel floor-beams of the bridge on the up-stream side; length of chain, 25.74 feet. Gage readings are taken each morning and evening by James Brennan. The gage datum is referred to the United States Geological Survey bench mark — a circle marked on a boulder at the right-hand end of the bridge on the down-stream side; elevation, 1,151.00 feet. Elevation of gage zero, 1,130.03 feet.

The great freshet of October 9-11, 1903, apparently changed the stream bed and cross-section in the vicinity of the gage. Measurements made during 1904 to 1906 have been applied toward the construction of a new rating curve.

Daily Gage Height, in Feet, of Schoharie Creek at Prattsville, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	4.95	4.95	5.27	5.52	5.07	5.61	4.95	4.3	4.3	4.22	4.7	4.92
2	5.0	4.9	5.37	5.37	5.01	5.46	4.70	4.35	4.3	4.2	4.6	4.9
3	5.1	4.8	5.17	5.27	4.98	5.21	4.85	4.3	4.3	4.2	4.6	5.0
4	5.2	4.8	7.85	5.37	4.96	5.08	4.95	4.3	4.3	4.2	4.6	5.0
5	5.25	4.7	5.85	6.25	4.96	5.01	4.82	4.4	4.25	4.2	4.55	5.1
6	5.05	4.7	5.37	6.62	4.91	5.31	4.65	4.4	4.2	4.2	4.5	* 5.55
7	5.25	4.7	5.27	5.92	5.38	5.08	4.6	4.75	4.18	4.2	4.5	5.5
8	5.45	4.72	5.22	5.72	5.41	4.94	4.52	4.9	4.18	4.2	4.5	5.1
9	5.4	4.72	5.17	5.59	5.56	5.02	4.52	4.55	4.15	4.2	4.45	5.52
10	5.35	4.8	5.17	7.67	5.38	5.27	4.59	4.45	4.15	4.28	4.45	5.6
11	5.45	4.8	5.27	7.12	5.27	5.37	4.52	4.4	4.15	4.3	4.5	5.75
12	5.6	4.8	5.27	6.22	5.17	5.0	4.47	4.32	4.15	4.3	4.58	5.6
13	5.5	4.8	5.27	6.47	5.11	4.8	4.4	4.25	4.15	4.3	4.55	5.4
14	5.5	4.9	5.27	9.5	5.06	4.87	4.38	4.25	4.18	4.22	4.55	5.4
15	5.4	4.9	5.27	7.52	5.01	4.77	4.32	4.22	4.1	4.2	4.55	5.3
16	5.4	4.9	5.27	6.87	4.98	4.82	4.3	4.2	4.1	4.2	4.75	5.3
17	5.25	4.95	5.07	6.72	4.91	5.47	4.35	4.22	4.05	4.2	4.65	5.15
18	5.1	5.0	4.77	6.42	4.86	5.5	4.42	4.2	4.08	4.2	5.68	5.1
19	5.0	4.97	4.77	6.27	4.84	5.6	4.3	4.2	4.05	4.2	7.08	5.2
20	4.95	4.92	4.82	6.17	4.81	5.42	4.35	4.12	4.08	5.68	6.22	5.3
21	5.15	4.95	4.99	6.02	4.76	5.15	4.28	4.4	4.18	5.32	6.1	5.4
22	5.38	5.93	5.02	5.82	4.78	5.18	4.25	4.45	4.4	5.18	5.95	5.2
23	5.7	6.15	5.02	5.72	4.74	5.18	4.32	4.4	4.45	4.95	5.75	5.1
24	7.05	5.37	4.99	5.57	4.71	5.08	4.35	4.3	4.32	4.8	5.45	5.1
25	5.65	5.47	4.87	5.47	4.66	4.88	4.28	4.2	4.22	6.1	5.3	5.0
26	5.4	5.97	4.87	5.37	4.71	4.78	4.22	4.2	4.2	5.5	5.18	5.0
27	5.35	5.87	8.5	5.27	6.14	4.7	4.28	4.9	4.18	5.05	5.12	5.0
28	5.2	5.39	7.32	5.17	8.16	4.62	4.28	5.1	4.2	5.0	5.1	4.9
29	5.12	......	5.79	5.07	7.51	4.6	4.32	4.95	4.2	4.9	5.0	4.9
30	5.08	......	5.69	5.07	6.31	4.48	4.3	4.5	4.28	4.8	5.0	5.0
31	5.0	......	5.67	......	5.84	......	4.3	4.38	......	4.72	......	5.7

NOTE.—Ice conditions January 7–21, February 3–22, February 28–March 3 and March 20–26; ice 0.1 to 0.5 foot thick.

River frozen over from December 4 to 31; ice from 0.30 to 0.75 foot thick. The following comparative readings were taken:—

DATE.	Thickness of ice at gage.	Gage reading to water-surface.	Gage reading to top of ice.
	Feet.	*Feet.*	*Feet.*
December 19	.38	5.1	5.2
December 22	.25	5.1	5.2
December 26	.83	4.9	5.0
December 29	.75	4.9	4.9

December 31 ice went out of river at station. During frozen period for January, February and March the readings were taken to the water-surface through a hole cut in the ice.

Gage readings for frozen period during December were to top of ice with readings to water-surface through a hole cut in the ice on Wednesday and Saturday of each week.

Current Meter Discharge Measurements of Schoharie Creek at Prattsville, N. Y.

DATE.	Hydrographer.	Width.	Area of section.	Gage height.	Discharge.
1906.		*Feet.*	*Square feet.*	*Feet.*	*Second-feet.*
Aug. 25	C. C. Covert	32.5	46	4.25	*41
Nov. 3	C. C. Covert	180	483	4.62	137

* Made by wading one-quarter mile below bridge.

Rating Table for Schoharie Creek at Prattsville, N. Y., from January 1, 1905, to December 31, 1906.

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
Feet.	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*
4.10	18	5.30	465	6.50	1,470	7.70	3,150
4.20	28	5.40	525	6.60	1,600	7.80	3,300
4.30	42	5.50	585	6.70	1,720	7.90	3,460
4.40	61	5.60	663	6.80	1,850	8.00	3,620
4.50	85	5.70	741	6.90	1,970	8.20	3,960
4.60	125	5.80	819	7.00	2,100	8.40	4,300
4.70	165	5.90	897	7.10	2,260	8.60	4,640
4.80	205	6.00	975	7.20	2,390	8.80	4,980
4.90	245	6.10	1,070	7.30	2,540	9.00	5,320
5.00	285	6.20	1,170	7.40	2,680	9.20	5,680
5.10	345	6.30	1,270	7.50	2,830	9.40	6,040
5.20	405	6.40	1,370	7.60	2,990	9.60	6,400

The above table is applicable only for open-channel conditions. It is based on discharge measurements made during 1904 and 1906. It is well defined between gage heights 4.1 eet and 8 feet. Above 4.4 feet the table is the same as for 1904.

Mean Daily Discharge, Second-feet, of Schoharie Creek at Prattsville, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	265	265	......	601	327	671	265	42	42	31	165	253
2	285	245	......	507	231	561	165	52	42	28	125	245
3	345	......	......	447	278	411	225	42	42	28	125	285
4	405	......	3,380	507	278	333	265	42	42	28	125	285
5	435	......	858	1,220	278	291	213	61	35	28	105	......
6	315	......	507	1,620	250	471	145	61	28	28	85	......
7	......	......	459	913	513	333	125	185	25	28	85	......
8	......	......	417	757	531	260	93	245	25	28	85	......
9	......	......	387	655	632	297	93	105	23	28	73	......
10	......	......	387	3,100	513	435	93	73	23	38	73	......
11	......	......	447	2,290	429	495	93	61	23	42	85	......
12	......	......	447	1,190	381	315	73	47	23	42	117	......
13	......	......	447	1,390	351	225	61	35	23	42	105	......
14	......	......	447	6,350	321	225	57	35	25	31	105	......
15	......	......	447	2,860	291	185	46	31	18	28	105	......
16	......	......	447	1,930	278	213	42	28	18	28	185	......
17	......	......	327	1,740	250	555	52	31	11	28	145	......
18	......	......	193	1,390	229	585	66	28	16	28	725	......
19	......	......	193	1,240	237	663	42	28	11	28	2,230	......
20	......	......	......	1,140	221	537	52	20	16	725	1,190	......
21	......	......	......	994	189	375	38	61	25	477	1,070	......
22	513	......	......	835	197	393	35	73	61	393	936	......
23	741	1,120	......	757	181	393	47	61	73	265	780	......
24	2,170	507	......	640	169	333	52	42	47	205	555	......
25	702	567	......	567	149	237	38	28	31	1,070	465	......
26	525	952	......	507	169	197	31	28	28	585	393	......
27	495	874	4,470	447	1,110	165	38	245	25	315	357	......
28	405	......	2,570	387	3,890	133	38	345	28	285	345	......
29	357	......	811	327	2,850	125	47	265	28	245	285	......
30	333	......	733	327	1,280	80	42	85	38	205	285	......
31	285	......	718	......	850	......	42	56	......	173	......	......

Monthly Discharge of Schoharie Creek at Prattsville, N. Y.
[Drainage area, 238 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1906.					
April	6,350	327	1,250	5.21	5.81
May	3,890	149	578	2.41	2.78
June	671	80	350	1.46	1.63
July	265	31	87.5	.365	.42
August	345	20	82.0	.342	.39
September	73	11	29.8	.124	.14
October	1,070	28	178	.742	.86
November	2,230	73	384	1.60	1.78

MOHAWK RIVER AT FONDA, N. Y.

*Current Meter Discharge Measurements of Mohawk River at Fonda, N. Y.**

DATE.	Hydrographer.	Gage height.	Width.	Area of section.	Mean velocity.	Discharge.
1906.		*Feet.*	*Feet.*	*Square feet.*	*Ft. per second.*	*Second-feet.*
May 12	C. A. Poole	6.0	348.5	1,714.8	2.72	4,673
May 18	C. A. Poole	5.6	322.1	1,536.5	2.46	3,773
May 29	C. A. Poole	8.08	365.9	2,481.9	36.7	9,100

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River at Fultonville Bridge, Fonda, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dce.
1906.												
1	......	......	......	......	276.4	275.3	276.1	275.0	273.8	......	275.2	276.1
2	......	......	......	......	276.1	275.0	276.9	274.7	274.0	......	274.9	275.6
3	......	......	......	......	279 2	274.8	276.5	274.4	273.4	......	274.6	275.5
4	......	......	......	......	279.3	274.6	275.9	274.3	273.8	......	274.5	275.6
5	......	......	......	......	278.4	274.6	275.8	274.6	273.8	......	274.4	276.2
6	......	......	......	......	277.8	274.6	275.9	275.2	273.8	......	274.3	276.2
7	......	......	......	......	277.1	274.8	275.8	274.9	273.8	274.0	274.3	277.1
8	......	......	......	......	276.4	274.8	274.7	275.0	273.8	274.5	274.3	277.8
9	......	......	......	......	276.4	275.1	274.6	274.7	......	274.6	274.3	277.2
10	......	......	......	......	276.3	276.0	275.7	274.5	......	274.4	274.3	276.5
11	......	......	......	......	276.3	276.0	276.8	274.4	......	274.6	274.4	276.5
12	......	......	......	......	276.0	275.7	276.2	274.2	......	275.0	274.5	276.6
13	......	......	......	......	......	275.0	275.4	274.2	......	274.8	275.2	276.5
14	......	......	......	......	......	274.8	274.8	274.2	......	274.4	275.2	276.2
15	......	......	......	......	......	274.6	274.7	274.2	......	274.2	274.9	276.3
16	......	......	......	......	......	274.7	274.5	274.0	273.7	274.2	275.0	279.6
17	......	......	......	......	......	275.6	274.4	273.9	273.6	274.2	274.6	279.3
18	......	......	......	......	......	276.5	274.6	273.7	273.6	274.1	274.7	279.0
19	......	......	......	......	......	276.0	274.5	273.7	273.6	274.1	277.2	278.4
20	......	......	......	......	......	275.4	274 4	273.7	273.6	274.2	279.0	277.2
21	......	......	......	......	......	275.0	274.4	273.8	273.7	276.4	277.8	276.5
22	......	......	......	......	......	274.8	274.2	274.0	273.8	276.6	278.0	276.4
23	......	......	......	......	......	274.8	274.2	274.1	273.9	275.4	277.5	276.7
24	......	......	......	......	......	274.8	274.3	274.1	274.2	274.8	276.8	277.1
25	......	......	......	......	......	274.8	274.2	274.0	274.4	274.6	276.5	277.4
26	......	......	......	......	......	274.8	274.1	273.8	274.2	275.0	275.7	277.8
27	......	......	......	......	278.6	274.6	274.1	274.0	274.1	275.0	275.7	276.5
28	......	......	......	......	279.4	274.4	274.1	274.2	274.2	275.1	276.4	276.4
29	......	......	......	276.8	278.2	274.4	274.1	274.3	274.1	275.0	277.0	276.2
30	......	......	......	276.2	276.4	274.4	274.4	274.4	......	275.3	276.7	275.9
31	......	......	......	......	275.7	......	274.8	274.0	......	275.3	......	276.0

*Weight-and-chain gage on Fonda and Fultonville bridge. Gage zero = 270.00, Barge canal datum.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River at Fort Plain, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	294.56	293.79	293.3	296.62	294.47	292.98	295.64	292.62	291.07	291.37	292.97	294.02
2	294.12	293.14	293.36	295.72	294.02	292.55	295.47	291.92	290.82	291.67	292.62	293.57
3	293.82	292.11	293.12	295.48	296.82	292.43	295.02	291.62	290.92	291.27	292.42	293.07
4	293.67	292.72	297.47	296.03	296.67	292.40	293.67	291.62	290.77	290.97	292.17	292.58
5	294.83	292.74	296.2	296.54	295.97	292.28	293.67	292.37	290.82	290.92	292.02	293.07
6	294.72	293.04	295.70	296.32	295.37	292.14	293.47	292.82	290.97	291.12	291.92	294.27
7	294.1	292.87	295.06	295.71	294.67	292.39	292.75	292.62	290.87	291.87	291.77	294.27
8	293.51	292.87	294.1	295.12	294.47	292.49	292.27	292.77	290.77	292.32	291.82	294.06
9	294.42	292.94	293.92	294.74	294.47	293.12	292.27	291.87	290.57	292.42	291.72	293.67
10	294.37	293.13	294.12	294.74	294.37	293.42	293.92	291.52	290.62	292.27	291.77	292.97
11	294.52	292.97	293.52	296.07	294.27	293.57	294.47	291.32	290.37	292.97	292.27	292.77
12	294.7	292.87	293.38	297.2	293.92	293.22	293.77	290.97	290.72	293.07	293.02	292.72
13	294.78	292.97	292.98	296.42	293.92	292.52	292.92	290.97	290.82	292.62	293.52	292.77
14	294.38	293.04	292.98	296.38	295.12	291.97	292.62	291.02	290.57	292.07	293.22	292.77
15	293.94	292.9	292.66	300.42	295.22	292.07	292.07	291.12	290.42	291.67	292.97	293.02
16	293.82	292.84	292.3	300.45	294.27	291.97	291.82	290.97	290.52	291.57	292.72	296.37
17	294.22	292.83	292.71	299.48	293.72	293.47	291.92	290.87	290.37	291.42	292.47	295.77
18	293.78	292.78	292.4	298.54	293.57	293.72	292.12	290.77	290.37	291.12	293.62	295.17
19	293.76	292.74	292.17	297.8	293.32	293.42	291.92	290.57	290.57	291.27	296.27	294.72
20	293.36	292.81	292.07	297.76	293.17	292.87	291.72	290.67	290.52	293.97	295.87	293.57
21	293.63	293.77	292.38	297.58	292.67	292.52	291.52	291.17	290.72	294.97	295.22	293.62
22	296.94	298.62	292.53	297.67	292.42	292.32	291.45	291.57	290.97	294.42	295.32	293.47
23	298.99	296.28	292.47	297.54	292.22	292.37	291.37	291.46	291.27	293.12	294.92	293.27
24	300.62	295.91	292.3	296.3	292.42	292.47	291.38	291.25	292.72	292.57	294.52	293.27
25	299.86	295.63	292.39	295.52	292.22	292.57	291.13	290.93	291.87	292.62	293.37	293.27
26	297.34	296.02	292.44	294.92	292.27	292.27	290.96	290.77	291.47	293.07	293.62	293.07
27	296.1	295.02	292.57	294.72	295.64	292.07	290.91	291.17	291.57	293.32	294.07	292.92
28	294.8	293.6	301.81	294.42	296.07	291.87	290.84	291.97	291.47	293.02	294.62	292.77
29	294.32	......	298.99	295.27	295.1	291.87	291.22	290.92	291.22	293.47	294.82	292.77
30	293.74	......	297.57	294.32	293.77	291.87	291.97	291.47	291.22	293.32	294.52	292.82
31	293.82	......	298.29	......	293.3	......	292.62	291.17	......	293.82	......	294.57

EAST CANADA CREEK AT DOLGEVILLE, N. Y.

This creek rises in Hamilton county, flows southward between Herkimer and Fulton counties, and joins the Mohawk at East creek.

A gaging station on this stream was established for the U. S. Board of Engineers on Deep Waterways in 1898. It has since been maintained by the U. S. Geological Survey in co-operation with this Department.

Observations are taken at High falls, near Dolgeville, about 7 miles from the outlet of the stream. The gaging station is located at the dam of the Herkimer County Light and Power Company. The dam is of rubble masonry, 19 feet high, and has a flat crest 6 feet wide and 190.25 feet long between abutments. The elevation of the up-stream edge of the crest is 1 foot below that of the lip. The impounded water is conducted to the power-house, 500 feet below the dam, through a wrought-iron flume, 10 feet in diameter.

Readings of the depth on the crest are taken from a vertical gage board attached to the buldhead, 6 feet up-stream, twice each day by Willard Hayward. The mean of the readings is used in computing the discharge. A record is also kept of the run of the water-wheels and the elevation of water in the tail-race. The record since January 1, 1903, has been computed from a discharge curve based on the United States Geological Survey experiments on a full-sized model of the dams, made at Cornell University. The flow through the turbines for this period has also been computed from current-meter measurements, made in the tail-race of the electric power-plant instead of from the manufacturers' rating tables for the water-wheels, as formerly. The turbines are of a special Victor cylinder-gate type. The two main wheels are each 36 inches in diameter, and their speed is controlled by Lombard governors.

Spruce creek, the principal tributary of East Canada creek, enters 1 mile above Dolgeville, and drains an area of 50 square miles. Water is diverted from this creek and from Beaver creek, one of its tributaries, at Diamond Hill, and is carried to Little Falls through a cast-iron and vitrified-pipe conduit, 9 miles long. The water-supply of Dolgeville is taken from Cold brook, a tributary of East Canada creek. No allowance for diversion of water-supply has been made in computing the run-off for East Canada creek.

Mean Daily Discharge, Second-feet, of East Canada Creek at High Falls near Dolgeville, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	260	484	†	1,000	951	471	1,070	468	92	213	997	492
2	433	214	210	962	1,140	409	1,010	172	63	142	759	365
3	423	209	159	850	2,680	383	851	191	240	160	179	112
4	312	†	742	817	2,180	340	619	145	124	153	165	234
5	348	290	517	1,400	1,600	265	745	83	132	110	192	†
6	288	*208	517	1,310	1,380	288	402	358	136	95	170	†
7	105	*275	†	1,090	†	234	378	351	95	383	175	700
8	218	224	221	795	826	366	491	176	100	284	180	370
9	263	252	316	715	893	420	584	163	85	154	170	[illegible]
10	*218	219	138	380	1,010	406	565	162	123	279	200	478
11	*221	†	†	860	938	456	519	176	90	370	171	*184
12	326	261	214	830	816	392	449	114	95	434	281	*214
13	230	*238	230	1,130	748	259	272	121	95	384	244	363
14	142	*224	214	2,020	675	208	326	121	100	285	238	239
15	218	255	213	5,760	768	158	328	108	85	195	209	838
16	195	192	224	4,800	730	175	205	112	85	170	170	*548
17	200	110	148	4,170	606	330	190	74	95	127	156	*518
18	200	†	115	3,460	545	508	200	82	90	120	149	623
19	185	185	193	3,710	452	270	185	61	85	183	769	521
20	175	191	209	3,620	540	248	144	165	80	954	977	794
21	102	319	184	3,230	470	231	130	175	105	580	914	805
22	714	434	189	3,620	370	250	80	195	100	404	1,150	444
23	2,380	376	193	2,910	394	258	158	134	309	826	982	377
24	2,870	260	157	2,100	366	220	148	129	123	167	693	205
25	1,500	341	174	1,670	356	395	160	105	105	175	576	105
26	1,230	432	179	1,390	330	209	155	85	105	551	481	300
27	1,050	422	171	1,210	†	459	128	305	105	270	476	270
28	842	†	1,230	1,040	1,570	609	150	459	181	461	691	345
29	780	......	1,290	864	826	238	245	204	146	403	658	299
30	550	......	1,080	950	1,050	227	409	63	207	429	617	367
31	501	......	1,430	......	640	......	604	200	......	468	......	330
Mean	564	272	377	1,960	900	322	384	176	119	320	459	404

Monthly Discharge of East Canada Creek at High Falls, near Dolgeville, N. Y.
[Drainage area, 256 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1906.					
January	2,870	102	564	2.20	2.54
February	484	110	272	1.06	1.10
March	1,430	115	377	1.47	1.70
April	5,760	380	1,960	7.66	8.55
May	2,680	330	900	3.52	4.06
June	609	158	322	1.26	1.41
July	1,070	80	384	1.50	1.73
August	468	61	176	.688	0.793
September	309	63	119	.465	0.519
October	954	95	320	1.25	1.44
November	1,150	149	459	1 79	2.00
December	838	105	404	1 61	1.86
The year	1,550	146	522	2.04	27.70

* Crest obstructed by ice at times in winter. Ice went out of dam April 5-6.
† Record incomplete.

MOHAWK RIVER AT LITTLE FALLS, N. Y.

A gaging station was established at the lower (Gilbert's) dam at Little Falls, N. Y., for the U. S. Board of Engineers on Deep Waterways in 1898. It has since been maintained by the U. S.

Geological Survey in co-operation with this Department. The dam is of masonry, having the form of a circular arc, and furnishes power for the Astoronga Knitting Mill and the mill of the Little Falls Paper Company. In the Astoronga Knitting Mill are two turbines, built by T. H. Risdon & Co., Mount Holly, N. J. In the mill of the paper company are three Camden turbines and one 60-inch Reddy turbine, built in Little Falls.

There are three dams at Little Falls. The upper one is a State dam, diverting water for the supply of the Erie canal; the lower two are used for water-power development. The gage record kept at the lower dam shows the amount of water flowing down-stream from Little Falls, but does not include the diversion at the State dam above the gaging station, and hence does not represent the total yield from the tributary drainage area of 1,306 square miles.

In calculating the discharge for 1906, use has been made of the experiments of the United States Geological Survey at Cornell University in 1903 on flow over dams.

Mean Daily Discharge, Second-feet, of Mohawk River at Little Falls, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	3,560	2,590	1,820	6,410	2,160	†	574	†	†	†	†	†
2	3,470	1,590	1,660	4,830	1,810	......	1,120	......	......	......	......	......
3	2,080	839	1,520	3,130	5,910	......	3,560	......	......	......	......	......
4	1,990	1,210	5,810	3,580	5,820	......	4,960	......	......	......	......	......
5	3,790	1,270	5,000	5,450	4,270	......	3,570	......	......	......	......	......
6	3,820	1,110	5,000	5,380	3,860	......	2,620	......	......	......	......	......
7	2,610	1,100	3,590	4,300	2,320	......	1,500	......	......	......	......	......
8	2,080	1,100	2,610	3,240	1,710	......	725	......	......	......	......	......
9	1,480	1,180	2,420	2,630	2,090	......	1,760	......	......	......	......	......
10	1,480	1,190	2,730	3,020	2,040	......	2,820	......	......	......	......	......
11	1,620	1,210	2,180	5,020	1,980	......	3,400	......	......	......	......	......
12	2,080	1,070	1,780	5,950	1,460	......	2,150	......	......	......	......	......
13	2,270	1,140	1,590	5,380	1,480	......	1,090	......	......	......	......	......
14	2,230	1,220	1,350	5,420	4,590	......	726	......	......	......	......	......
15	2,080	1,180	1,150	12,100	3,700	......	725	......	......	......	......	......
16	2,070	1,220	1,030	12,020	1,980	......	905	......	......	......	......	......
17	2,690	1,060	1,140	10,730	1,770	......	903	......	......	......	......	......
18	2,240	1,140	1,130	8,790	1,570	......	1,040	......	......	......	......	......
19	2,290	1,210	921	6,880	1,400	......	810	......	......	......	......	......
20	1,960	1,210	914	6,520	842	......	704	......	......	......	......	......
21	3,030	2,910	1,020	6,950	796	......	600	......	......	......	......	......
22	6,780	5,240	1,140	7,620	649	......	496	......	......	......	......	......
23	10,690	4,980	921	7,140	684	......	741	......	......	......	......	......
24	*16,740	5,190	1,020	4,740	766	......	701	......	......	......	......	......
25	*14,170	4,930	958	3,210	684	......	626	......	......	......	......	......
26	8,450	5,400	1,100	2,400	734	......	653	......	......	......	......	......
27	5,920	5,290	5,960	3,120	3,290	......	549	......	......	......	......	......
28	4,260	3,400	11,010	2,540	4,920	......	587	......	......	......	......	......
29	2,770	......	10,900	3,220	3,510	......	427	......	......	......	......	......
30	2,130	......	7,950	2,410	2,030	......	729	......	......	......	......	......
31	2,530	......	7,620	......	1,170	......	1,270	......	......	......	......	......
Mean	4,040	2,220	3,060	5,470	2,320	......	1,390	......	......	......	......	......

* Approximate.

† No estimates; record incomplete.

Monthly Discharge of Mohawk River at Little Falls, N. Y.

[Drainage area, 1,306 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximun.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1906.					
January	*16,740	1,480	4,040	3.10	3.57
February	5,400	839	2,220	1.70	1.77
March	11,010	914	3,060	2.34	2.70
April	12,100	2,400	5,470	4.19	4.68
May	5,910	649	2,320	1.78	2.05
June†	....	....	....	....	....
July	4,960	427	1,390	1.06	1.22
August†	....	....	....	....	....
September†	....	....	....	....	....
October†	....	....	....	....	....
November†	....	....	....	....	....
December†	....	....	....	....	....

* Approximate.
† No estimates; record incomplete.

MOHAWK RIVER ABOVE STATE DAM, LITTLE FALLS, N. Y.

A gaging station has been maintained by this Department in cooperation with the U. S. Weather Bureau above the State dam at Little Falls since November 18, 1904, to get a record of the fluctuation of the water-surface in the pond above the dam. The gage, which is a graduated vertical board, is located about 400 feet north of the canal feeder bulkhead on wing of culvert to waste-weir No. 12, Erie canal. It has been observed twice each day and the following tables show the mean of these observations reduced to elevation of water-surface:

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River, above State Dam at Little Falls, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	......	......	......	......	......	......	......	363.7
2	......	......	......	......	......	......	......	......	......	......	......	363.6
3	......	......	......	......	......	......	......	......	......	......	......	363.6
4	......	......	......	......	......	......	......	......	......	......	......	363.7
5	......	......	......	......	......	......	......	......	......	......	......	363.6
6	......	......	......	......	......	......	......	......	......	......	......	363.6
7	......	......	......	......	......	......	......	......	......	......	......	363.5
8	......	......	......	......	......	......	......	......	......	......	......	363.5
9	......	......	......	......	......	......	......	......	......	......	......	363.4
10	......	......	......	......	......	......	......	......	......	......	......	363.4
11	......	......	......	......	......	......	......	......	......	......	......	363.5
12	......	......	......	......	......	......	......	......	......	......	......	363.5
13	......	......	......	......	......	......	......	......	......	......	......	363.5
14	......	......	......	......	......	......	......	......	......	......	......	363.5
15	......	......	......	......	......	......	......	......	......	......	......	363.5
16	......	......	......	......	......	......	......	......	......	......	......	363.5
17	......	......	......	......	......	......	......	......	......	......	......	363.5
18	......	......	......	......	......	......	......	......	......	......	363.7	363.5
19	......	......	......	......	......	......	......	......	......	......	363.6	363.5
20	......	......	......	......	......	......	......	......	......	......	363.7	363.5
21	......	......	......	......	......	......	......	......	......	......	363.7	363.5
22	......	......	......	......	......	......	......	......	......	......	363.6	363.5
23	......	......	......	......	......	......	......	......	......	......	363.7	363.8
24	......	......	......	......	......	......	......	......	......	......	363.7	363.8
25	......	......	......	......	......	......	......	......	......	......	363.7	363.8
26	......	......	......	......	......	......	......	......	......	......	363.7	363.7
27	......	......	......	......	......	......	......	......	......	......	363.7	363.5
28	......	......	......	......	......	......	......	......	......	......	363.6	365.1
29	......	......	......	......	......	......	......	......	......	......	363.6	365.0
30	......	......	......	......	......	......	......	......	......	......	363.9	365.0
31	......	......	......	......	......	......	......	......	......	......	......	365.0

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River, above State Dam at Little Falls, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec
1905.												
1	365.0	363.8	363.7	368.0	364.6	364.0	364.1	364.3	364.1	363.9	364.4	365.1
2	364.9	363.8	363.7	367.3	364.3	364.0	365.6	364.1	364.2	364.0	364.3	365.0
3	364.8	363.8	363.7	366.6	364.1	364.0	366.3	364.0	365.9	364.1	364.2	367.3
4	364.7	363.8	363.8	366.6	364.3	364.0	365.6	363.9	367.8	364.1	364.2	367.1
5	364.7	363.8	363.8	367.3	364.3	364.1	364.9	363.8	369.9	363.9	364.3	366.8
6	364.7	363.8	363.8	367.7	364.7	364.2	364.3	363.9	366.8	363.8	364.4	365.4
7	364.7	363.8	363.8	367.3	364.4	364.4	364.2	364.6	366.4	363.8	365.4	365.0
8	364.7	363.8	363.8	366.1	364.4	364.4	364.2	364.2	365.1	363.8	365.2	364.6
9	364.7	363.8	363.8	365.2	364.4	364.7	364.1	364.0	364.7	363.9	365.0	364.5
10	364.7	363.8	363.8	365.3	364.3	364.6	364.0	363.9	364.3	363.8	365.1	364.5
11	364.5	363.7	363.8	365.5	364.2	364.5	363.8	363.9	364.0	364.1	364.4	364.4
12	364.4	363.7	363.7	366.4	364.2	364.0	364.0	364.1	364.3	364.7	364.3	364.3
13	364.7	363.7	363.7	366.2	364.2	363.9	363.8	364.5	364.5	365.1	363.9	364.2
14	364.6	363.8	363.7	366.2	364.6	363.8	364.1	364.4	364.3	365.1	363.8	364.1
15	364.5	363.8	363.7	365.8	364.6	363.7	364.5	364.8	364.1	364.7	363.5	364.0
16	364.2	363.9	363.7	365.2	364.7	363.7	364.1	365.0	364.1	364.1	364.3	363.9
17	364.1	363.9	363.8	364.8	364.6	363.8	363.9	365.0	364.5	364.0	364.6	363.8
18	364.0	363.9	363.9	364.7	364.4	364.1	363.9	364.6	365.3	363.8	364.4	363.8
19	364.0	363.9	364.8	364.5	364.6	364.6	364.1	364.1	365.4	364.9	364.2	363.8
20	364.0	363.9	365.0	364.2	364.4	364.5	364.2	364.0	365.0	365.4	364.0	363.6
21	364.0	363.9	364.9	365.4	364.3	364.8	364.0	364.0	365.0	365.1	363.9	363.8
22	364.0	363.8	364.7	366.6	364.2	365.8	363.9	363.9	364.6	364.8	363.8	366.0
23	363.8	363.8	365.2	365.7	364.0	365.4	363.9	363.8	364.2	364.3	363.6	365.4
24	363.9	363.8	365.4	365.3	363.9	365.2	363.9	363.8	364.1	363.9	363.6	365.3
25	363.8	363.8	365.9	365.0	363.8	365.0	363.9	363.8	364.1	363.9	363.6	364.7
26	363.8	363.8	367.2	365.1	363.8	366.1	363.9	363.8	364.0	363.8	364.1	364.3
27	363.8	363.7	368.0	365.2	364.1	365.4	363.8	363.9	364.0	363.7	364.1	364.2
28	363.8	363.7	368.0	365.2	363.9	365.8	363.8	363.6	363.9	363.7	364.4	364.1
29	363.8	......	367.8	365.1	364.0	365.0	363.8	363.9	363.9	363.7	365.4	364.4
30	363.8	......	368.6	365.1	364.0	364.2	364.0	364.0	363.9	363.7	365.8	365.2
31	363.8	......	369.3	......	364.0	......	364.8	364.1	......	364.1	......	365.0

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River, above State Dam at Little Falls, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	364 51	364.06	363.91	365.41	364.36	363.66	364.36	363.31	363.21	363.61	363.81	364.01
2	364.36	363.86	364.86	365.06	364.31	363.61	365.16	363.31	363.21	363.51	363.81	363.76
3	364.61	363.81	364.01	364.66	365.31	363.56	365.06	363.31	363.31	363.36	363.81	363.66
4	364.51	363.71	365.31	364.66	364.91	363.41	364.66	363.46	363.41	363.46	363.66	363.61
5	365.16	363.71	364.86	365.21	364.61	363.41	364.06	363.31	363.31	363.66	363.61	363.61
6	364.61	363.66	364.76	365.21	364.51	363.41	363.76	363.41	363.26	363.61	363.61	363.61
7	364.31	363.61	364.71	365.11	364.26	363.66	363.66	363.56	363.21	363.61	363.61	363.61
8	364.21	363.61	365.01	364.91	364.11	363.76	363.41	363.76	363.21	363.61	363.61	363.61
9	364.06	363.61	364.26	364.46	364.06	364.01	364.01	363.31	363.21	363.51	363.66	363.61
10	363.86	363.61	364.31	364.56	364.01	364.41	364.41	363.21	363.21	363.51	363.81	363.63
11	363.81	363 61	363.91	365.06	363.96	364.11	364.36	363.31	363.21	363.51	363.81	363.61
12	363.51	363.61	363.86	365.26	363.91	364.01	364.06	363.31	363.31	363.66	363.81	363.61
13	364.31	363.61	363.81	365.01	363.91	363 66	363.76	363.31	363.21	363.76	363.81	363.66
14	364.11	363.61	363.71	365.01	364.86	363.51	363.61	363.31	363.21	363.61	363.81	363.71
15	363.91	263.61	363.61	366.76	364.66	363.51	363.36	363.31	363.21	363.61	363.81	363.81
16	363.96	363.61	363.61	367.16	364.26	363.61	363.31	363.31	363.21	363.61	363.81	363.71
17	364.26	363.61	363.61	366.61	364.11	364.01	363.31	363.31	363.21	363.61	363.81	363.71
18	364.16	363 61	363.61	366.06	364.06	364.21	363.16	363.31	363.31	363.61	364.56	363.61
19	364.06	363.61	363.61	365.61	363.91	364.01	362.66	363.31	363.31	363.61	365.16	363.61
20	363.91	363.66	363.61	365.66	363 91	363.76	362.72	363.31	363.31	363.61	365.26	363.61
21	363.91	363.96	363.61	365.71	363.56	363.61	363.36	363.46	363.46	363.61	364.96	363.61
22	365.36	365.21	363.61	365.71	363.36	363.61	363.46	363.31	363.61	363.61	364.66	363.61
23	366.76	365.01	363.61	365.61	363.31	363.61	363.31	363.21	363.81	363.71	364.56	363.61
24	367.81	365.11	363.61	365.21	363.31	363.81	363.26	363.21	363.71	363.81	364.41	363.61
25	367 56	364 96	363.61	364.86	363.31	363.76	363.31	363.21	363.61	363.81	364.31	363.61
26	366.26	365.01	363 61	364.61	363.31	363.71	363.31	363 21	363.46	363.81	364.31	363.76
27	365.76	364.51	365 51	364.56	364.41	363.66	363.31	363 26	363.36	363.81	364.26	363.86
28	364.66	364.16	366.81	364.41	365.01	363.51	363.31	363.51	363.31	363.81	364.16	363.71
29	364.41	......	366.46	364.41	364.51	363.51	363.31	363.41	363.31	364.01	364.06	363.76
30	364.16	......	365.96	364.66	363.96	363.56	363.31	363.31	363.41	363.86	364.01	363.86
31	364.11	......	366.06	......	363.81	......	363.46	363.26	......	363.81	......	364.06

Current Meter Discharge Measurements of Mohawk River at Raceway, South Side of river, at Little Falls, N. Y.

DATE.	Hydrographer.	Width.	Area of section.	Mean velocity.	Discharge.
1905.		*Feet.*	*Square feet.*	*Ft. per second.*	*Second-feet.*
Sept. 2	C. A. Poole	37.4	128	1.99	255
Nov. 14	C. A. Poole	42.6	156	1.32	206

Current Meter Discharge Measurements of Erie Canal Feeder at Little Falls, N. Y.

DATE.	Hydrographer.	Width.	Area of section.	Mean velocity.	Discharge.
1905.		*Feet.*	*Square feet.*	*Feet per second.*	*Second-feet.*
Aug. 31	C. A. Poole	19 0	86	2.03	175
Sept. 2	C. A. Poole	19.0	88	1.67	147
Nov. 14	C. A. Poole	19.0	84	1.93	162

Current Meter Discharge Measurements of Raceway, North Side of River, at Little Falls, N. Y.

DATE.	Hydrographer.	Width.	Area of section.	Mean velocity.	Discharge.
1905.		*Feet.*	*Square feet.*	*Feet per second.*	*Second-feet.*
Aug. 31	C. A. Poole	13.7	65	2.66	173
Sept. 2	C. A. Poole	13.7	58	3.66	212
Nov. 14	C. A. Poole	13.7	65	3.66	238

MOHAWK RIVER NEAR HERKIMER, N. Y.

This gaging station, which is located at the highway bridge over the Mohawk river between Herkimer and Mohawk, was established November 23, 1904, by C. A. Poole. The gage is a vertical board secured to the east wing of the north abutment of the bridge. It is graduated in feet and tenths and the elevation of zero is 377.43, Barge canal datum. Observations of the state of the stream are taken twice each day by Henry Edick, Jr.

The current-meter measurements are made from the downstream side of the bridge, which has a single span of 124.3 feet. The river channel is of uniform cross-section and straight for several hundred feet below the bridge. About 200 feet above the bridge there is a slight bend to the south. During extreme high water the river overflows its banks and flows through additional openings in the dike formed by the highway, and it is necessary to measure this additional flow in order to get the total flood discharge at this station.

This gaging station is located about one and one-quarter miles above the junction of the Mohawk river and West Canada creek. The drainage area of West Canada creek, above its junction with the Mohawk river, is 583 square miles and the drainage area of the Mohawk, above the same point, is 712 square miles.

Current Meter Discharge Measurements of Mohawk River at Herkimer, N. Y.

DATE.	Hydrographer.	Gage height.	Elevation of water-surface.	Width.	Area of section.	Mean velocity.	Discharge.
		Feet.	*Square feet.*	*Feet.*	*Square feet.*	*Ft. per second.*	*Second-feet.*
1905.							
Aug. 31	C. A. Poole.........	2.95	379.48	122	685	2 65	1,816
Sept. 1	C. A. Poole.........	2.05	379.48	122	575	2.03	1,165
Oct. 16	C. A. Poole.........	2.2	379.63	122	593	1.99	1,178
Nov. 10	C. A. Poole.........	3.4	380.83	122	740	2.89	2,138
1906.							
April 3	C. A. Poole.........	3.1	380.53	122	685	3.07	2,103
April 12	C. A. Poole.........	5.7	383.13	122	1,022	4.30	4,403
April 13	C. A. Poole.........	5.5	382.9	122	979	4.36	4,269
April 17	C. A. Poole.........	7.4	384.8	122	1,210	5.23	6,326
April 19	C. A. Poole.........	3.25	380.68	122	6,912	2.82	1,953
April 27	C. A. Poole.........	1.5	378.9	122	498	1.93	960
May 11	C. A. Poole.........	1.4	378.8	122	478	1.73	825
May 18	C. A. Poole.........	1.0	378.4	121	433	1.47	639
May 23	C. A. Poole.........	0.6	378.0	113	380	.99	377
May 29	C. A. Poole.........	2.2	379.6	122	556	2.36	1,311
June 7	J. H. McCormick....	1.1	378.5	111	429	1.25	517
Nov. 6	E. F. Weeks........	1.0	378.4	122	447	0.93	418
Nov. 22	E. F. Weeks........	3.4	380.8	125	745	2.64	1,967

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River at Herkimer, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1												378.1
2												378.2
3												378.5
4												378.3
5												378.0
6												377.9
7												378.1
8												378.3
9												378.4
10												378.3
11												378.3
12												378.1
13												378.1
14												378.3
15												378.3
16												378.2
17												378.1
18												378.1
19												378.0
20												378.1
21												378.1
22												378.1
23											378.2	378.4
24											378.2	378.9
25											378.1	379.0
26											378.3	379.2
27											378.2	379.3
28											378.1	384.9
29											378.1	384.9
30											378.1	384.9
31												385.0

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River at Herkimer, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	385.0	378.7	378.6	386.9	379.3	378.6	379.2	380.2	379.8	378.6	380.9	382.3
2	385.0	378.6	378.5	386.0	379.0	378.6	381.6	379.9	379.0	378.5	381.3	381.5
3	384.0	378.6	378.4	384.7	378.8	378.7	382.7	379.0	382.3	379.6	380.6	384.1
4	383.1	378.5	378.4	384.0	379.0	378.6	382.7	378.7	385.7	379.5	379.8	385.1
5	382.6	378.4	378.4	384.4	379.1	378.5	380.8	378.4	386.3	378.8	380.5	384.9
6	382.1	378.4	378.4	385.8	379.9	378.9	379.7	378.9	385.8	378.7	380.7	383.7
7	381.6	378.4	378.4	385.7	380.0	379.3	379.5	381.1	384.3	378.5	382.0	382.3
8	382.0	378.3	378.3	384.7	380.2	379.9	379.3	380.0	383.3	378.3	382.3	380.7
9	382.0	378.2	378.3	383.2	379.4	379.8	379.1	378.9	381.2	378.3	382.0	380.2
10	381.7	378.1	378.4	381.9	379.2	378.8	378.9	378.6	379.8	378.3	380.9	380.0
11	381.4	378.0	378.4	382.5	379.0	378.6	378.7	378.6	379.5	378.3	380.2	379.7
12	382.2	378.0	378.4	383.1	378.8	379.2	379.1	379.4	380.9	381.8	379.9	379.6
13	383.4	378.0	378.4	383.0	378.6	379.3	378.7	381.3	381.1	382.4	380.1	379.5
14	383.1	377.9	378.3	382.9	378.6	378.8	379.6	381.0	380.1	382.2	380.1	379.3
15	382.7	378.0	378.3	381.8	378.5	378.5	379.9	379.1	379.6	381.3	379.9	379.0
16	382.0	378.0	378.2	380.9	378.4	378.4	379.3	382.8	379.4	380.0	379.4	378.9
17	381.3	378.1	378.2	380.2	378.3	378.2	378.6	382.5	379.3	379.4	379.7	379.0
18	380.9	378.1	379.8	379.8	378.2	379.6	378.4	381.3	382.0	379.2	379.7	379.0
19	380.4	378.1	383.8	379.5	378.1	381.3	379.0	379.6	382.1	381.4	379.5	379.0
20	380.6	378.2	384.6	379.4	378.2	381.2	379.3	379.1	381.9	382.1	379.2	378.9
21	380.4	378.3	385.2	380.4	378.5	382.6	378.8	378.9	381.8	382.0	378.9	379.6
22	380.4	378.4	385.1	382.3	378.5	383.7	378.4	378.8	380.8	380.7	378.9	382.7
23	380.2	378.4	384.1	381.7	378.4	383.3	378.3	378.6	379.6	380.0	378.8	383.0
24	380.0	378.4	382.6	380.3	378.3	382.7	378.3	378.5	379.0	379.8	378.9	383.3
25	379.7	378.5	384.6	379.8	378.2	379.9	378.4	378.4	378.9	379.4	379.4	381.3
26	379.6	378.7	387.0	379.5	378.7	381.9	378.4	378.4	378.9	379.1	379.5	380.0
27	379.4	378.7	387.3	379.4	379.3	383.1	378.4	378.3	378.8	378.9	379.3	379.7
28	379.2	378.7	387.3	379.0	379.8	383.2	378.2	378.3	378.7	378.8	379.4	379.6
29	379.0	......	387.3	378.7	379.6	382.2	378.1	378.3	378.7	378.7	381.1	380.3
30	379.0	......	387.1	379.4	379.0	380.2	378.8	379.0	378.7	378.7	382.5	382.1
31	378.8	......	387.3	......	378.4	......	381.6	380.6	......	378.6	......	381.7

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River at Herkimer, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	380.43	379.88	379.33	383.73	378.48	378.53	379.93	379.0	378.4	378.6	379.1	379.8
2	379.33	379.33	379.73	382.63	378.93	378.43	380.88	378.6	378.6	378.8	379.0	379.6
3	379.88	378.83	379.88	381.13	380.23	378.38	379.13	378.4	378.6	378.7	378.8	379.0
4	379.88	378.88	381.03	381.18	381.83	378.33	379.08	378.6	378.6	378.6	378.6	378.8
5	381.83	379.03	382.38	382.33	380.58	378.23	379.08	379.4	378.6	378.6	378.5	378.7
6	381.08	378.93	382.68	382.43	380.13	378.33	378.73	379.0	378.6	379.0	378.4	379.0
7	380.03	379.03	381.33	381.83	379.28	378.48	378.48	379.0	378.6	379.5	378.4	381.0
8	379.73	379.08	379.53	380.88	378.93	378.43	378.28	379.6	378.5	379.3	378.6	380.6
9	379.73	378.98	379.38	380.48	378.98	378.88	378.88	379.0	378.5	379.3	378.6	379.4
10	379.88	378.88	379.58	381.08	379.08	379.43	380.73	378.8	378.4	379.3	378.6	379.8
11	380.08	378.88	379.23	382.73	378.93	379.43	380.88	378.6	378.5	379.8	378.8	380.0
12	379.93	378.98	379.13	383.58	378.58	379.03	379.53	378.6	378.6	379.4	378.9	380.1
13	380.28	379.03	378.96	383.18	378.88	378.53	378.96	378.5	378.6	379.3	378.8	379.6
14	379.93	379.13	378.83	382.58	380.08	378.38	378.73	378.4	378.5	378.8	379.0	379.4
15	379.33	379.03	378.68	382.38	379.73	378.13	378.43	378.4	378.4	378.8	379.1	380.2
16	379.88	378.93	378.48	382.78	378.78	378.18	378.28	378.5	378.5	378.7	379.2	383.0
17	380.38	378.88	378.33	384.58	378.48	378.83	378.48	378.4	378.4	378.7	379.2	383.1
18	379.88	378.78	378.33	382.83	378.38	378.68	378.88	378.4	378.4	378.6	379.8	382.8
19	379.83	378.73	378.28	380.38	378.28	378.88	378.58	378.4	378.4	378.6	382.6	381.6
20	379.58	378.78	378.23	380.53	378.23	378.58	378.38	378.4	378.3	381.7	381.8	380.1
21	380.88	381.78	378.13	380.38	378.18	378.38	378.38	378.8	378.6	382.2	380.1	379.2
22	383.08	382.88	378.23	380.58	378.08	378.28	378.43	379.1	378.8	380.4	380.6	379.5
23	384.73	382.58	378.13	380.38	377.98	378.18	378.43	378.8	379.3	379.3	380.6	379.4
24	386.78	382.43	378.13	379.78	377.93	378.28	378.53	378.7	379.5	379.0	381.0	379.3
25	386.05	381.43	378.13	379.38	377.93	378.33	378.48	378.6	378.8	379.2	380.0	379.8
26	384.08	382.08	378.33	379.13	377.83	378.28	378.38	378.4	378.6	379.1	379.3	379.2
27	383.08	380.68	385.03	379.03	380.33	378.13	378.28	378.5	378.8	379.0	379.8	379.1
28	380.43	379.53	385.73	378.98	381.88	378.03	378.38	379.3	378.6	379.0	380.8	378.9
29	379.88	......	385.88	378.73	381.58	378.08	378.48	378.8	378.6	379.6	380.8	378.7
30	379.48	......	384.68	378.63	378.83	378.33	378.58	378.6	378.5	379.3	380.7	378.7
31	379.23	......	384.23	......	378.73	......	379.23	378.4	......	379.2	......	381.1

WEST CANADA CREEK DRAINAGE BASIN.

DESCRIPTION OF BASIN.

West Canada creek rises in West Canada lakes, in southwest-central Hamilton county, and flows southwestward, then southeastward into the Mohawk at Herkimer, N. Y.

The drainage area is shown on the Utica, Little Falls, Remsen, Wilmurt, Old Forge and Canada lakes quadrangles, U. S. Geological Survey Topographic map.

There are about fifty small lakes and a few undrained ponds in the watershed of the stream. Most of these are situated near the head waters and above the gaging station, the largest single water-surface being Honnedaga lake, 1.4 square miles in extent. There is also a small amount of controllable storage, in reservoirs formed by three dams. Swamps and marshes are numerous in the region of the head waters, usually adjoining lakes and tributaries and having an extent of one-half square mile or less each

Much of the region above the gaging station is timber-covered. There are extensive sand areas in the central and upper drainage basins. The soil of the upper watershed is underlaid by granitic gneiss usually at or near the surface, excepting in alluvial valleys. From a point just above Twin Rock bridge and extending downstream beyond Trenton Falls, the underlying geological formation is Trenton limestone.

Compacted snow accumulates in the woodlands in winter, often to a depth of three or four feet, and representing an inch of water for each five or six inches of snow. This melts slowly, feeding the stream in March and April, which months may show a run-off greatly exceeding the precipitation.

In order to determine the precipitation on the drainage basin of upper West Canada creek, three rainfall and snow-gage stations were established in the fall of 1905. The gages were erected by Daniel L. Mott. The observers are as follows:

Hoffmeister's.— Mrs. Augustus H. Hoffmeister.

North Lake.— George C. Paull.

Honnedaga.— A. D. Barber.

Current Meter Discharge Measurements of Herkimer Hydraulic Canal at Herkimer, N. Y.

DATE.	Hydrographer.	Gage height.	Width.	Area of section.	Mean velocity.	Discharge.
1906.		*Feet.*	*Feet.*	*Square feet.*	*Ft. per second.*	*Second-feet.*
Sept. 17	R. E. Horton.....	1.20	....	140.67	....	*153
Sept. 18	E. F. Weeks......	0.50	30.5	153.0	1.88	288
Oct. 4	E. F. Weeks......	0.50	30.0	154.8	1.86	288
Oct. 13	E. F. Weeks......	0.50	30.0	155.8	2.23	348

* Measurement made with floats.

WEST CANADA CREEK AT KAST BRIDGE, N. Y.

This gaging station, which is located on West Canada creek about four miles from its junction with the Mohawk river, was established May 15, 1905, by R. E. Horton, hydrographer, U. S. Geological Survey.

The gage is of the weight-and-reel type and is placed in a box secured to the north railing of bridge at first panel point from east abutment. The readings are taken by measuring down from a scale in the box to the water-surface by means of an iron weight suspended by graduated tape, which is attached to the reel. The scale in box is one foot long, graduated to tenths and hundredths, with its zero at elevation 464.04, Barge canal datum. The end of weight used to locate the water-surface is 49.80 feet from zero of tape, which is graduated to feet. The elevation of bottom of weight, when zero of tape is opposite zero of scale, is, therefore, 414.24. The elevation of bench mark on north end of bridge seat of west abutment is 458.02.

Observations are taken twice daily by Lloyd Kast.

Discharge measurements are made from the down-stream side of the bridge, to which the gage tape is attached. The initial point for soundings is the top face of the left abutment, down-stream side. The drainage area at this point is 574 square miles, or 58 per cent greater than at Twin Rock bridge.

This portion of the basin is underlain by Hudson river and Trenton shales. The topography is moderately rolling. The soil is ordinarily rather impervious and usually under culture. The precipitation and snow storage are considerably less than in the upper part of the drainage area.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of West Canada Creek at Kast Bridge.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	442.5	442.1	441.8	443.1	443.3	442.1	443.3	441.6	441.0	441.1	441.7	442.1
2	442.2	441.8	441.8	442.7	443.1	441.4	443.3	441.4	440.6	441.2	441.4	441.6
3	442.0	441.4	441.6	442.5	444.4	441.3	442.6	441.2	440.2	441.1	441.3	441.5
4	442.2	441.2	443.2	442.8	443.4	441.2	442.2	441.4	441.0	441.0	441.3	441.1
5	442.8	441.6	442.7	443.4	443.7	441.2	442.5	442.3	441.1	441.3	441.3	441.3
6	442.6	441.4	442.4	443.2	443.3	441.4	442.1	441.9	440.9	441.1	441.3	442.0
7	442.1	441.6	442.3	442.8	442.9	441.0	441.7	441.7	440.9	440.9	441.2	442.1
8	442.0	441.6	442.1	442.6	442.4	441.7	441.5	441.3	440.9	441.6	441.1	441.5
9	441.7	441.6	442.1	442.6	442.4	442.1	441.7	441.1	441.8	441.4	441.1	441.6
10	441.8	441.6	442.2	442.2	442.4	442.0	442.3	441.1	440.6	441.5	441.2	441.5
11	441.7	441.6	441.6	442.7	442.3	442.0	442.4	440.9	440.8	442.0	441.3	441.5
12	441.9	441.6	441.7	443.1	442.0	441.9	442.0	440.9	440.8	441.8	441.6	441.4
13	441.9	441.7	441.4	442.9	442.0	441.5	441.6	440.8	440.6	441.6	441.5	441.4
14	441.7	441.6	441.5	443.2	443.3	441.4	441.4	441.4	440.6	441.4	441.5	441.5
15	441.7	441.5	441.2	446.4	443.3	441.3	441.3	441.1	440.7	441.3	442.0	442.6
16	441.8	441.6	441.4	446.1	442.5	441.4	441.2	440.8	440.8	441.3	441.4	443.0
17	441.8	441.6	441.5	445.1	442.1	441.8	441.3	440.8	440.6	441.1	441.3	442.9
18	441.7	441.5	441.3	444.8	442.2	442.6	441.2	440.7	440.9	441.1	441.8	442.4
19	441.8	441.5	441.3	444.9	442.1	441.9	441.1	440.7	440.7	441.0	443.2	442.0
20	441.7	441.5	441.2	445.0	442.3	441.5	441.0	440.6	440.6	442.6	443.2	441.8
21	441.9	442.5	441.2	445.0	441.9	441.4	440.9	441.3	440.8	442.5	442.6	441.9
22	442.4	443.1	441.3	445.1	440.9	441.4	441.0	441.2	440.9	442.4	442.7	441.8
23	445.1	442.7	441.2	445.1	440.8	441.6	441.0	441.2	441.3	441.9	443.0	441.6
24	445.8	442.6	441.2	444.1	440.8	441.8	441.0	441.1	441.6	441.4	442.4	441.4
25	444.5	442.7	441.3	443.2	440.8	441.8	440.9	440.9	441.3	441.6	442.3	441.3
26	443.6	443.0	441.4	442.6	440.9	441.4	440.9	440.7	441.0	441.8	442.0	441.4
27	443.2	442.3	443.4	443.1	442.4	441.3	440.7	440.9	441.0	441.8	441.8	441.4
28	442.7	442.0	444.2	442.6	443.2	441.3	441.0	441.1	441.0	441.9	442.6	441.4
29	442.3	......	443.4	443.3	442.3	441.2	441.1	441.6	441.0	442.0	442.5	441.4
30	442.2	......	443.4	443.2	442.2	441.3	441.1	441.2	441.1	441.9	442.1	441.4
31	442.1	......	443.9	......	441.8	......	441.8	441.1	......	442.0	......	443.0

Current Meter Discharge Measurements of West Canada Creek at Kast Bridge.

DATE.	Hydrographer.	Width.	Area of section.	Gage height.	Discharge.
1906.		*Feet.*	*Square feet.*	*Feet.*	*Second-feet.*
April 5	D. L. Mott	196	745	30.58	2,870
Sept. 18	E. F. Weeks	171	296	28.22	340
Oct. 4	E. F. Weeks	170	295	28.27	335
Oct. 13	E. F. Weeks	170	404	28.86	708
Oct. 19	E. F. Weeks	170	292	28.32	364
Nov. 20	E. F. Weeks	197	712	30.53	2,630
Nov. 22	E. F. Weeks	197	598	29.95	1,760

WEST CANADA CREEK AT TRENTON FALLS, N. Y.

This gaging station, which is located at the dam of the Utica Gas and Electric Co., was established October 17, 1905, by C. A. Poole. The gage board is secured to face of dam in a vertical position and is placed above the water-surface, the readings being taken by means of chain and plumb-bob passing on pulley over top of gage. The observations are taken by placing plumb-bob at water-surface and reading the gage at a point marked on chain ten feet above plumb-bob. The elevation of zero of gage is 1,009.56, to which all readings are added. The gage is graduated in feet and inches and is read twice each day by C. W. Young.

The dam is of concrete with masonry coping and has a spillway 97.9 feet long. Another spillway or by-pass two feet lower than crest or main spillway allows the water to pass through a rock channel on east side of dam. The crest of this lower spillway is 163.4 feet long at an elevation of 1,017.12, Barge canal datum. The discharge over the two spillways has been calculated by means of the weir formula, using coefficients derived from the United States Geological Survey experiments.

The discharge diverted by the Power Company has been computed from diagrams expressing the flow as a function of the kilowatts used. These diagrams were made from tests made by the Power Company to determine the discharging capacity of the turbines, which are a special Swiss design. These tests were made by computing the discharge over weirs placed in the tail-race.

A daily record is kept of the total kilowatts used in twenty-four hours, also the number of hours every day each turbine runs, there being four turbines in all.

The mean discharge has been calculated from each observation taken at the gage, thereby giving a mean for twelve hours, and the maximum and minimum discharges given in the accompanying table are, therefore, means for twelve hours and do not represent the highest or lowest flow of short duration.

The pondage above the Trenton falls dam is very limited and the operation of the generators during low water has to be adjusted according to the conditions of inflow. The inflow is controlled by pondage above Hinckley dam. Owing to irregularity of operation during low water, the Trenton falls record is considered uncertain for the low water period.

Current Meter Discharge Measurements of West Canada Creek below Power-house a Trenton Falls, N. Y.

DATE.	Gage height.	Elevation of water-surface.	Width.	Area of section.	Mean velocity.	Discharge.
1905.	*Feet.*		*Feet.*	*Square feet.*	*Ft. per second.*	*Second-feet.*
October 17.......	3.0	754.0	109.0	621	1.29	801
November 3......	3.6	754.6	109.0	686	2.18	1,496

Mean Daily Elevation of Water-surface (Barge Canal Datum) of West Canada Creek below Trenton Falls, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	756.8	754.2	754.1	753.5	753.2	755.6	754.0	753.3
2	......	......	......	......	757.2	754.2	754.1	753.5	753.0	754.9	754.0	753.3
3	......	......	......	......	756.8	754.0	754.2	753.5	753.2	754.6	753.9	753.2
4	......	......	......	......	756.9	753.9	754.1	753.5	754.7	754.3	753.8	753.3
5	......	......	......	......	756.8	753.9	754.0	753.5	754.5	754.1	753.8	753.2
6	......	......	......	......	......	754.4	754.6	754.5	754.2	754.3	753.7	753.2
7	......	......	......	......	......	754.5	754.3	754.0	754.0	754.2	753.7	753.2
8	......	......	......	......	......	754.6	754.0	753.7	753.9	754.0	753.6	753.2
9	......	......	......	......	......	755.2	753.8	753.8	753.7	754.0	753.5	753.2
10	......	......	......	757.1	......	755.9	753.7	753.6	753.6	754.5	753.4	753.2
11	......	......	......	756.7	755.1	755.1	753.8	753.5	753.6	755.9	753.4	753.2
12	......	......	......	755.9	754.5	754.4	753.7	753.3	753.5	755.7	753.3	753.3
13	......	......	......	755.4	754.5	754.5	753.7	753.4	753.4	755.0	753.4	753.3
14	......	......	......	755.1	754.4	754.1	753.7	753.3	753.3	754.8	753.4	753.2
15	......	......	......	754.8	754.4	753.9	753.7	753.4	753.6	754.5	753.4	753.2
16	......	......	......	754.7	754.9	753.9	753.6	753.3	753.8	754.1	753.4	753.2
17	......	......	......	754.4	755.1	753.8	753.3	753.1	753.8	754.0	753.3	753.2
18	......	......	......	754.4	754.7	753.7	753.5	753.2	753.5	753.8	753.3	753.3
19	......	......	......	754.4	754.5	753.6	753.6	753.1	753.7	753.7	753.3	753.2
20	......	......	......	754.4	754.8	753.5	753.5	753.8	753.8	753.6	753.3	753.3
21	......	......	......	754.3	755.0	753.5	753.5	756.9	754.3	755.0	753.4	753.2
22	......	......	......	754.2	754.7	753.9	753.5	755.4	754.3	756.4	753.4	753.3
23	......	......	......	754.5	754.4	754.0	753.4	755.4	753.9	755.8	753.4	753.3
24	......	......	......	755.0	754.4	753.9	753.3	754.9	753.8	754.9	753.4	753.2
25	......	......	......	756.4	754.5	753.7	753.3	754.4	755.9	754.6	753.4	753.2
26	......	......	......	756.6	754.5	753.6	753.4	754.0	755.7	754.5	753.4	753.3
27	......	......	......	756.4	754.9	753.5	753.3	753.8	754.9	754.5	753.3	753.8
28	......	......	......	756.7	755.0	753.5	753.6	753.6	754.6	754.4	753.3	754.5
29	......	......	......	757.0	754.6	753.4	753.9	753.5	754.8	754.2	753.2	754.6
30	......	......	......	757.0	754.3	753.7	754.0	753.3	756.3	754.1	753.3	754.3
31	......	......	......	......	754.3	......	753.7	753.3	......	754.1	......	754.3

Mean Daily Elevation of Water-surface (Barge Canal Datum) of West Canada Creek below Trenton Falls, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	754.2	753.5	753.5	756.9	755.8	753.7	755.0	754.1	753.9	753.4	754.6	754.8
2	754.2	753.5	753.5	756.3	754.9	753.7	756.0	753.8	753.7	753.4	755.0	754.5
3	754 0	753.5	753.5	755.5	755.2	753.6	756.9	752.7	755.1	753.6	754 7	756.0
4	753.8	753.6	753.6	755.6	755.1	753.6	755.6	753.6	757.6	754.0	754.5	756.0
5	753.8	753.5	753.5	756.7	755.4	753.6	754.9	753.5	757.5	753.8	754.5	755.2
6	753.8	753.6	753.5	756.6	755.1	753.9	754.2	753.8	755.9	753.6	754.5	754.9
7	753.8	753.6	753.5	755.8	755.0	754.3	754.5	754.1	755.1	753.5	755.3	754.7
8	753.7	753.5	753.5	755.2	755.2	754.8	754 5	753.9	754.7	753.4	755.0	754.6
9	753.7	753.6	753.5	754.8	755.0	754.5	754.1	753.6	754.4	753.5	754.7	754.5
10	753.8	753.5	753.5	754.8	754.8	754.1	753.8	753.5	754.3	753.5	754.8	754.0
11	753.8	753.5	753.5	755.7	754.4	754.2	753.7	753.5	753.9	753.5	754.7	753.9
12	753.9	753.6	753.5	756.3	754.3	754.3	753.4	753.4	753.8	754.4	754.3	753.8
13	754.2	753.6	753.5	756.2	754.2	754.4	753.7	753.7	753.9	754.9	754.3	753.8
14	754.1	753.4	753.5	755.8	753.6	754.2	754.1	753.6	753.9	754.8	754.1	753.7
15	754.0	753.6	753.5	755.5	754.5	754.1	754.1	753.6	753.8	754.5	754.1	753.6
16	754.0	753.6	753.5	755.1	754.3	754.1	754 0	754.3	753.8	754.3	754.2	753.6
17	753.9	753.5	753.4	754.7	754.1	753.9	754.1	754.2	753.8	754.1	754.0	753.6
18	753.8	753.5	753.5	754.3	754.1	755.0	754.2	753.9	754.8	754.3	753.9	753.5
19	753.8	753.4	753.6	754.3	754.7	755.1	754.1	753.8	755.6	755.2	753.9	753.6
20	753.8	753.5	753.8	754.5	754.3	754.8	754.4	753.4	754.9	755.0	753.8	753.7
21	753.8	753.5	754.1	755.2	753.8	754.7	754.1	753.5	754.9	754.9	753.8	753.8
22	753.7	753.4	754.2	757.0	754.0	755.3	753.9	753.5	754.7	754.7	753.7	754.4
23	753.6	753.4	754.4	756.0	753.9	754.9	753.6	753.4	754.4	754.5	753.6	754.7
24	753.6	753.4	754.3	755.4	753.8	754.3	753.6	753.3	754.2	754.4	753.7	754.3
25	753.7	753.5	754 3	755.4	753.7	753.8	753.6	753.4	754.0	754.3	753.9	754.0
26	753.6	753.4	754.4	755.6	753.7	754.8	753.7	753.3	753.8	754.2	754.1	753.9
27	753.7	753.5	754.7	755.8	754.1	755.1	753.6	753.2	753.8	754.0	754.1	753.8
28	753.7	753.5	755.0	755.7	754.0	754.9	753.6	753.3	753.7	754.0	753.9	753.8
29	753.7	......	755.1	756.0	753.8	754.5	753.6	753.2	753.7	754.0	754.5	753.8
30	753.7	......	756.0	756.3	753.8	754.0	753.5	753.3	753.6	753.8	755.5	754.5
31	753.6	......	756.8	......	753.9	......	754.4	754.2	......	753.8	......	754.4

Mean Daily Elevation of Water-surface (Barge Canal Datum) of West Canada Creek below Trenton Falls, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	754.3	754.2	753.9	754.7	755.0	753.8	755.3	753.8	753.2	753.3	753.9	754.0
2	754.2	753.9	753.8	754.5	754.8	753.7	754.9	753.7	753.2	753.3	753.8	753.8
3	754.1	753.8	753.7	754.4	755.8	753.5	754.4	753.3	753.2	753.2	753.7	753.8
4	754.4	753.7	754.4	754.4	755 8	753.4	754.6	753.3	753.4	753.2	753.6	753.8
5	754.3	753.7	754.4	754.9	755.1	753.4	754.4	754.3	753.2	753.2	753.6	754.2
6	754.3	753.5	754.1	754.7	755.0	753.3	754.1	754.0	753.2	753.2	753.6	754.0
7	754.1	753.6	754.0	754.5	755.2	753.7	753.9	753.9	753.2	733.4	753 6	753.9
8	754.0	753.6	753.9	754.4	755.1	753.9	753.8	753.6	753.2	753.7	753.6	753.8
9	754.0	753.6	753.9	754.3	754.4	754.2	753.8	753.5	753.1	753.5	753.5	753.8
10	753.9	753.7	753.9	754.1	754.5	754.1	754.3	753.3	753.1	753.8	753.5	753.9
11	753.8	753.8	753.8	754.2	754.4	754.2	754.4	753.3	753.1	753.9	753.5	753.8
12	753.9	753.7	753.7	754.3	754.4	754.0	754.0	753.3	753.1	753.9	753.6	753.8
13	753.9	753.6	753.7	754.4	754.9	753.7	753.8	753.5	753.1	753.7	753.6	753.8
14	753.8	753.6	753.6	754.5	755.9	753.4	753.7	753.3	753.1	753.5	754.3	753.8
15	753.8	753.5	753.6	756.9	755.1	753.3	753.7	753 3	753.1	753.5	753.9	754.0
16	753.7	753.5	753.5	757.0	754.7	753.3	753.6	753.2	753.1	753.4	753.7	754.3
17	753.7	753.5	753.4	756.4	754.4	754.2	753.6	753.2	753.1	753.3	773.7	754.4
18	753.7	753 7	753.4	756.3	754.3	754.3	753.6	753.2	753.1	753.3	753.8	754.3
19	753.7	753.7	753.3	756.4	754.5	753.8	753.6	753.2	753.1	753.3	755.1	754.2
20	753.7	753.6	753.3	756.3	754.6	753.7	753.6	753.2	753.1	754.3	754.7	754.1
21	753.8	753.8	753.3	756.6	753.8	753.5	753.5	753.3	753.1	755.0	754.3	754.2
22	754.1	754.0	753.3	756.5	753.7	753.5	753.4	753.6	753.1	754.9	754.4	754.0
23	755.4	754.4	753.3	756.3	753.7	753.8	753.5	753.5	753.5	753.7	754.6	753.8
24	756.9	754.2	753.3	755.5	753.8	754.0	753.4	753.4	753.5	753.6	754.7	753.7
25	755.9	754.3	753.3	755.3	753.8	753.9	753.3	753.2	753.3	753.6	754.0	753.6
26	755.5	754.3	753.4	755.0	753.9	753.6	753.3	753.2	753.2	754.2	753.9	753.6
27	754.9	754.1	754.0	755.0	754.8	753.5	753.3	753.2	753.2	754.0	754.1	753.5
28	754.5	754.0	754.9	755.5	755.0	753.4	753.3	754.0	753.2	754.0	754.3	753.4
29	754.2	......	754.8	754.9	754.6	753.4	753.4	753.6	753.2	754.0	754.2	753.4
30	754.0	......	754.7	755.1	754.1	753.5	753.6	753.4	753.2	754.5	754.0	753.3
31	754.2	......	754.7	......	754.0	......	754.0	753.3	......	754.0	......	753.6

Mean Daily Elevation of Water-surface (Barge Canal Datum) of West Canada Creek above Trenton Falls (above Dam), N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	1,019.0	1,019.8	1,019.6	1,019.3	1,019.4	1,017.9	1,019.9	1,017.7	1,009.6	1,017.5	1,017.8	1,018.0
2	1,018.6	1,019.5	1,019.5	1,019.0	1,019.8	1,017.8	1,019.5	1,017.2	....	1,016.6	1,017.6	1,017.9
3	1,018.2	1,019.3	1,019.4	1,018.5	1,020.4	1,018.1	1,018.9	1,011.3	1,009.8	1,015.0	1,017.6	1,017.6
4	1,018.4	1,019.8	1,020.2	1,018.6	1,020.4	1,017.6	1,018.9	1,013.4	1,017.2	1,013.0	1,017.7	1,017.4
5	1,018.7	1,019.8	1,020.0	1,019.3	1,019.6	1,017.6	1,018.8	1,018.6	1,016.7	1,013.9	1,017.4	1,018.1
6	1,018.7	1,019.5	1,019.9	1,019.3	1,019.4	1,017.6	1,018.3	1,017.8	1,014.3	1,014.2	1,017.4	1,017.8
7	1,018.5	1,019.6	1,019.7	1,018.8	1,019.3	1,018.0	1,018.1	1,017.7	1,013.0	1,017.6	1,017.3	1,017.7
8	1,018.3	1,019.8	1,019.5	1,018.7	1,019.3	1,018.1	1,018.0	1,017.4	1,010.5	1,017.6	1,017.1	1,017.7
9	1,018.1	1,020.0	1,019.4	1,018.5	1,018.8	1,018.5	1,017.9	1,014.9	1,013.0	1,017.4	1,016.6	1,018.2
10	1,018.0	1,020.1	1,019.5	1,018.2	1,018.9	1,018.5	1,018.5	1,009.8	1,009.3	1,017.9	1,017.3	1,017.7
11	1,018.1	1,020.3	1,018.1	1,018.3	1,018.8	1,018.4	1,018.8	1,013.9	1,012.7	1,017.9	1,017.6	1,017.6
12	1,018.1	1,020.1	1,017.9	1,018.4	1,018.7	1,018.1	1,018.2	1,013.9	1,002.9	1,017.9	1,017.4	1,017.5
13	1,018.1	1,019.9	1,017.8	1,018.6	1,019.2	1,017.9	1,017.9	1,016.4	1,002.6	1,017.7	1,017.4	1,017.5
14	1,018.1	1,019.8	1,017.8	1,018.8	1,020.4	1,017.7	1,017.6	1,015.9	999.9	1,017.6	1,018.6	1,017.6
15	1,018.1	1,019.8	1,017.7	1,022.2	1,019.5	1,017.6	1,017.8	1,009.9	1,006.4	1,017.4	1,017.9	1,018.0
16	1,018.1	1,019.7	1,017.7	1,022.0	1,019.1	1,017.6	1,017.6	1,010.4	1,013.5	1,017.2	1,017.4	1,018.0
17	1,019.6	1,019.8	1,017.7	1,021.1	1,018.7	1,018.1	1,017.5	1,009.1	1,012.6	1,014.6	1,017.4	1,018.8
18	1,019.5	1,020.4	1,017.8	1,020.9	1,018.4	1,018.8	1,017.5	1,007.1	1,008.7	1,017.4	1,017.7	1,018.3
19	1,019.4	1,019.9	1,017.6	1,021.0	1,018.8	1,018.1	1,017.5	1,002.8	1,008.3	1,014.8	1,019.4	1,018.0
20	1,019.5	1,019.4	1,017.6	1,021.1	1,018.5	1,017.9	1,017.3	1,011.9	1,001.7	1,018.6	1,019.2	1,017.8
21	1,019.7	1,019.0	1,017.6	1,021.2	1,017.9	1,017.7	1,017.3	1,015.7	1,006.9	1,019.3	1,018.5	1,017.9
22	1,019.9	1,020.0	1,017.6	1,021.3	1,017.9	1,017.7	1,017.4	1,017.5	1,008.0	1,018.4	1,018.7	1,017.9
23	1,021.1	1,019.9	1,017.6	1,021.0	1,017.8	1,018.0	1,017.2	1,017.3	1,017.9	1,017.7	1,018.8	1,018.0
24	1,022.8	1,019.7	1,017.6	1,020.2	1,017.7	1,018.3	1,014.4	1,013.4	1,017.6	1,017.4	1,018.7	1,017.8
25	1,021.6	1,019.8	1,017.7	1,019.4	1,017.9	1,018.0	1,014.1	1,005.0	1,017.2	1,017.4	1,018.3	1,017.8
26	1,021.0	1,019.9	1,017.5	1,019.1	1,018.0	1,017.8	1,009.8	1,006.2	1,015.7	1,018.3	1,018.0	1,017.7
27	1,020.4	1,019.8	1,018.2	1,019.3	1,018.6	1,017.7	1,015.1	1,013.2	1,015.3	1,018.0	1,018.1	1,018.6
28	1,020.1	1,019.7	1,019.3	1,019.8	1,019.6	1,017.6	....	1,018.1	1,015.2	1,018.4	1,018.6	1,018.4
29	1,019.8	....	1,019.2	1,019.6	1,018.9	1,017.6	....	1,017.6	1,014.4	1,018.2	1,018.9	1,018.0
30	1,019.7	....	1,019.1	1,019.7	1,018.3	1,017.6	1,017.6	1,017.3	1,016.0	1,018.8	1,017.9	1,019.1
31	1,019.9	....	1,019.3	....	1,018.0	....	1,018.1	1,015.1	....	1,017.9	....	1,019.0

WEST CANADA CREEK AT TWIN ROCK BRIDGE, N. Y.

A current-meter gaging station was established at Twin Rock bridge, September 7, 1900, by Robert E. Horton, for the U. S. Geological Survey, by which it has since been maintained in co-operation with this Department. A gage board, divided decimally, is attached to the up-stream side of the right-hand abutment, the coping of the abutment over the gage being used as a bench mark. The bridge is 167.5 feet long between abutments, and consists of two spans. The bed is of gravel and cobble, and the entire flow passes underneath at all stages. In the winter the stream becomes completely ice-covered, requiring special discharge measurements. The gage is read each morning and evening by George Rood, and the record is furnished by the Utica Gas and Electric Company. During the greater part of the years 1905 and 1906 a duplicate record at this gaging station has been maintained by the Consolidated Water Co., of Utica, N. Y., a gage-reading being taken each morning by Frank McArthur, from a special gage equipped with a phosphor bronze tape, and from which accurate readings to hundredths of a foot can be obtained. This record has been used in calculating the daily discharge.

Current Meter Discharge Measurements of West Canada Creek at Twin Rock Bridge.

DATE.	Hydrographer.	Gage height.	Elevation of water-surface.	Width.	Area of section.	Mean velocity.	Discharge.
1095.		*Feet.*		*Feet.*	*Square feet.*	*Ft. per second.*	*Second-feet.*
Oct. 20	....	4.3	1,167.1	160.2	941	2.70	2,542
Nov. 9	....	3.1	1,165.9	160.2	749	1.98	1,484
Nov. 16	....	2.5	1,165.3	160.2	653	1.31	857
1906.							
April 17	E. F. Weeks........	6.80	......	160.5	1,314.2	4.14	*5,539
April 23	E. F. Weeks........	6.85	......	160.5	1,332.2	4.18	*5,571
Sept. 19	E. F. Weeks........	0.35	......	148.5	256.3	0.56	143
Sept. 19	C. C. Covert.........	0.35	......	157.0	253.3	0.52	131
Oct. 5	E. F. Weeks........	0.75	......	152.0	313.2	0.85	265

Mean Daily Discharge, Second-feet, of West Canada Creek at Twin Rock Bridge.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	826	903	504	......	......	......	......	......	......	......	......	......
2	600	690	440	......	......	......	......	......	......	......	......	......
3	488	472	382	......	......	......	......	......	......	......	......	......
4	580	544	870	......	......	......	......	......	......	......	......	......
5	881	1,088	1,040	......	......	......	......	......	......	......	......	......
6	914	520	903	......	......	......	......	......	......	......	......	......
7	750	536	730	......	......	......	......	......	......	......	......	......
8	680	528	560	......	......	......	......	......	......	......	......	......
9	552	536	480	......	......	......	......	......	......	......	......	......
10	544	504	512	......	......	......	......	......	......	......	......	......
11	544	488	274	......	......	......	......	......	......	......	......	......
12	710	480	328	......	......	......	......	......	......	......	......	......
13	620	448	200	......	......	......	......	......	......	......	......	......
14	640	472	186	......	......	......	......	......	......	......	......	......
15	771	432	158	......	......	......	......	......	......	......	......	......
16	750	382	156	......	......	......	......	......	......	......	......	......
17	750	391	156	......	......	......	......	......	......	......	......	......
18	700	382	106	......	......	......	......	......	......	......	......	......
19	660	408	106	......	......	......	......	......	......	......	......	......
20	680	364	108	......	......	......	......	......	......	......	......	......
21	690	391	144	......	......	......	......	......	......	......	......	......
22	859	760	138	......	......	......	......	......	......	......	......	......
23	1,880	958	104	......	......	......	......	......	......	......	......	......
24	†10,100	848	110	......	......	......	......	......	......	......	......	......
25	†6,200	815	108	......	......	......	......	......	......	......	......	......
26	2,144	992	112	......	......	......	......	......	......	......	......	......
27	1,690	826	142	......	......	......	......	......	......	......	......	......
28	1,428	690	1,258	......	......	......	......	......	......	......	......	......
29	1,124	......	1,148	......	......	......	......	......	......	......	......	......
30	914	......	1,004	......	......	......	......	......	......	......	......	......
31	1,052	......	1,064	......	......	......	......	......	......	......	......	......
Mean	1,346	602	435	......	......	......	......	......	......	......	......	......

* Logs on pier.

† Open section curve, with corrected gage height.

Monthly Discharge of West Canada Creek, at Twin Rock Bridge.
[Drainage area, 364 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1906.					
January	10,100	544	1,346	3.71	4.26
February	1,088	364	602	1.66	1.73
March	1,258	106	435	1.20	1.38
April					
May					
June					
July					
August					
September					
October					
November					
December					
The year					

PRECIPITATION IN UPPER WEST CANADA CREEK DRAINAGE BASIN.

Standard U. S. Weather Bureau rain gages were erected in November, 1905, at North lake, Honnedaga and Hoffmeister. The resulting observations are tabulated in the accompanying tables. The records at North lake are taken by Geo. C. Paull. North lake is located just outside of the West Canada creek watershed line. The observations at Honnedaga are taken by A. D. Barber; those at Hoffmeister are taken by Mrs. Augustus Hoffmeister.

Arrangements have been made to obtain a record of the depth of snow accumulation and of the water equivalent of the snow on ground at each of these stations. The snow fall in the winter of 1905–6 was unusually small and no available data regarding it was obtained.

Daily Precipitation at North Lake, near Atwell, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1												1.69
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												*1.0
13											†	
14											*.4	
15												
16												
17												
18												
19												
20												
21											*1.0	
22												
23											1.0	
24												
25												
26												*.5
27											*1.5	
28												
29												.5
30												
31												*.3
Total											3.9	3.99

Daily Precipitation at North Lake, near Atwell, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	*1.6											
2					.9							
3			1.6						1.1			
4	*.2			.5			.51	.89				
5					.42							
6	*1.1							.82				
7	*.3											
8												
9				*.01	.54		.59			(?) .65	.5	
10							.87					
11								.72				
12	*.2											
13				*.01	1.2							
14				? 1.2	1.8				.3			
15												
16	*.3											
17	*.4						.1					
18												
19										1.48		
20			.1									
21											.45	
22			.03	.45					.8	.15	.25	
23	.6											
24					1.2					.35		
25											.2	
26	.6									.55	.25	
27			.75		1.15			.7	.3			
28			.14				.48				.2	
29							.29					
30							2.0		.8			
31												
Total	5.3		2.62	2.17	7.21		4.84	3.13	3.3	3.18	1.85	

* Snow. † Began record.

Daily Precipitation near Hoffmeister, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1												
2												.63
3												1.81
4												
5												
6												
7												
8												
9											†	
10											T	
11											T	1.00
12												T
13											.25	
14												
15											T	
16											.30	
17												T
18												T
19												* T
20												.20
21												T
22												.40
23												T
24											.38	T
25												
26											.14	
27												
28											.63	
29											.72	
30												
31												*.55
Total											2.42	4.59

Daily Precipitation near Hoffmeister, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	*.50	T										
2	*T				1.06		.09					
3			*1.93				.79	T	.71			.05
4	*.25	*.48		.40	.25		.02	1.42		.03		*.39
5	*T	*.24			T	.21		.03				*.83
6				*.22	T	.34		.04		.74		
7	*.70					.80				T		
8						.20		.03				
9	*T	*.40		*1.69	.56	T	.84			.88	.24	
10				*T	.12	.57	.70	.05				*.49
11		*.50	*.28	*T				.08				
12	*.35			T	.63							
13					.55				.53			
14		*.30										
15			*.30	1.10		.21						.92
16							.09					
17	*.40					.61	.08					
18	*.50	*.59			.21	T					.34	
19			*1.04							1.46		
20	*.20		*.13			.15		1.72	.17		.05	*.48
21		*.84	*.10	.21		.22	.32				.29	
22						.31			1.53	.09	.06	
23				*T		.26	.08	.08			.05	
24	T				.20	T				.70		
25		.89			.80							
26									.38		.45	
27			1.15	T	1.17		.65	1.31		.75	.18	*.38
28					T	.24				T		
29				.08		.36	.29		.37	T		
30			.64	T		1.10	.40	T				
31	T											
Total	2.90	4.24	5.57	3.70	5.55	5.58	4.35	4.76	3.69	4.65	1.66	4.77

* Snow. † Began record.

Daily Precipitation at Honnedaga, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1							.05					
2		*.20							1.40			
3		*.50			.92			1.84				
4		*.30		.62			.59				.45	
5				*.21	.35	.65				.20		
6												
7											*1.35	
8						.73						
9				*.55	.59	.13	.95			.60		
10				*.11			.24					
11										1.40		
12		*.40			1.76			.55			*.70	
13									.28			
14				.12								
15												
16						.30	.03					
17					.06	.56	.06				.65	
18												
19*								1.20		.90		
20						.12			.21			
21		.78		.41			.25					
22							.06			.09	*.25	
23						.38			.90			
24					.22							
25		.35										
26					1.30			0 65				
27							.40				*.85	
28						.35	.36			*.76		
29						2.02			.94			
30				.07							.25	
31					.02							
Total		2.53		2.09	5.22	5.24	2.99	4.24	3.73	3.95	4.50	

* Snow.

MOHAWK RIVER AT UTICA, ONEIDA COUNTY, N. Y.

A current-meter gaging station was formerly maintained at the Genesee street bridge in Utica, by R. E. Horton, hydrographer, U. S. Geological Survey, but was discontinued May 1, 1903, owing to changes in the channel, due to the river straightening work begun by the city of Utica. A description of the drainage area of the Mohawk river, above Utica, and a record of the discharge for several months at this station are given in the Supplement to the Report of the State Engineer and Surveyor for 1903.

The present gaging station is located at the bridge on the Black River branch of the N. Y. C. & H. R. R. R., crossing the river about three-quarters of a mile west of Genesee street. It was established March 21, 1905, by C. A. Poole, in co-operation with the U. S. Weather Bureau. The gage is a vertical board, graduated in feet and tenths, and is secured to the southeast wing of the south abutment of the bridge, with its zero mark at elevation

394.81, Barge canal datum. Observations of the stage of the stream are taken twice each day under the direction of J. B. Mahoney, Superintendent of the Utica Division of the Hudson River Electric Power Co.

This station was established originally for the purpose of obtaining a record of the fluctuation of the water-surface in that vicinity, and has been maintained for that purpose principally. Several current-meter measurements, however, were made during 1905, from which the discharge has been calculated for the different stages of the river at the time of measurement. The location is not favorable, however, for meter measurements, the flow of the stream being sluggish, especially during low water, and the accuracy of the results is questionable, so no attempt has been made to make a continuous record of the discharge at this point.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River at Black River R. R. bridge, Utica, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	405.8	396.9	395.0	399.5	397.6	396.4	395.9	396.6	397.9
2	......	......	......	405.1	396.8	395.0	399.5	397.9	396.0	395.7	397.1	398.6
3	......	......	......	404.3	396.8	394.9	399.4	397.6	398.5	395.6	397.8	404.3
4	......	......	......	404.0	396.9	394.9	399.2	397.5	404.3	395.7	399.5	403.9
5	......	......	......	404.1	397.1	394.9	398.9	397.7	404.6	396.1	401.3	403.0
6	......	......	......	403.7	397.2	394.9	398.6	398.5	403.6	396.4	402.1	402.4
7	......	......	......	403.7	397.3	394.8	398.3	400.3	402.3	396.1	401.5	400.9
8	......	......	......	403.0	397.5	394.8	398.1	397.3	401.0	396.0	400.9	399.5
9	......	......	......	402.5	397.7	394.8	397.9	397.4	400.1	395.9	400.3	397.9
10	......	......	......	402.1	397.6	394.7	397.8	397.3	399.8	395.9	399.6	397.5
11	......	......	......	402.3	397.3	394.7	397.8	397.1	399.1	400.1	399.3	397.3
12	......	......	......	402.5	396.9	394.6	397.8	397.2	398.8	401.8	399.1	397.3
13	......	......	......	402.0	396.7	394.5	397.7	397.2	397.9	402.9	398.5	397.1
14	......	......	......	401.4	396.8	394.6	397.9	397.3	397.3	399.9	398.0	396.9
15	......	......	......	400.4	397.1	394.8	397.0	400.3	396.5	398.7	397.9	396.8
16	......	......	......	399.5	397.3	395.0	396.7	403.1	396.2	397.6	397.7	396.7
17	......	......	......	398.7	397.4	395.1	396.3	402.1	396.0	397.2	397.6	396.6
18	......	......	......	398.1	397.1	395.5	396.1	400.3	395.8	397.7	397.6	396.5
19	......	......	......	397.7	396.8	395.7	395.8	397.4	396.0	402.4	397.7	396.5
20	......	......	......	397.6	396.7	396.3	395.9	396.9	396.7	401.8	397.7	396.7
21	......	......	404.3	397.8	396.5	399.7	395.8	396.3	399.8	400.0	397.8	397.0
22	......	......	404.1	398.1	396.3	403.8	395.8	396.0	397.6	399.9	398.0	398.6
23	......	......	403.6	398.0	396.1	403.8	395.8	396.0	397.2	398.9	398.1	400.3
24	......	......	404.3	397.9	395.8	403.3	395.7	395.9	396.8	398.4	398.2	402.5
25	......	......	406.1	397.9	395.7	402.9	395.6	395.8	396.6	398.2	397.9	402.9
26	......	......	406.4	397.8	395.6	403.4	395.6	395.8	396.9	397.8	397.8	402.6
27	......	......	406.7	397.6	395.5	403.6	395.8	395.7	397.3	397.2	397.6	402.3
28	......	......	406.1	397.3	395.4	402.1	396.4	395.6	397.0	398.0	398.8	402.2
29	......	......	406.1	397.1	395.3	401.0	397.3	396.4	396.6	397.7	399.9	402.1
30	......	......	406.5	397.1	395.1	399.9	398.0	398.6	396.3	397.3	398.0	400.6
31	......	......	406.7	......	395.0	......	397.8	398.2	......	396.8	......	399.4

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River at Black River R. R. bridge, Utica, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	......	399.1	399.9	402.2	396.9	398.8	400.0	397.8	394.8	394.8	397.4	398.7
2	......	399.0	400.6	400.8	396.9	398.5	398.8	396.3	395.0	394.8	397.3	398.4
3	......	398.7	402.1	400.6	397.2	397.9	398.0	394.8	394.9	394.8	397.3	397.4
4	......	398.4	402.4	401.2	398.4	397.6	397.7	394.8	395.0	394.8	396.9	396.6
5	......	398.3	402.8	402.2	399.3	397.6	397.3	395.8	394.9	395.4	396.2	397.0
6	......	398.3	400.6	402.2	398.7	397.5	396.5	395.3	394.8	396.7	395.7	397.2
7	......	398.4	400.0	401.6	399.6	397.4	395.6	394.9	394.8	397.2	395.3	397.2
8	......	398.6	398.0	400.8	399.5	397.8	395.3	394.8	394.8	397.1	395.4	397.2
9	......	398.5	398.5	400.0	399.2	398.1	395.9	394.8	394.8	397.1	395.9	396.8
10	......	398.5	398.4	400.5	398.4	397.9	400.0	395.1	394.8	397.3	396.0	396.8
11	......	398.6	398.0	402.4	398.2	397.5	399.8	395.2	394.8	396.9	396.9	396.8
12	......	398.9	398.0	402.2	398.8	396.4	399.2	395.1	394.8	396.8	397.5	396.8
13	......	398.9	397.5	402.3	398.8	395.8	397.9	394.9	394.8	396.5	398.1	396.8
14	398.86	398.7	397.0	402.4	398.4	395.4	396.6	394.8	394.8	396.1	397.7	397.0
15	400.11	398.6	397.9	403.2	398.2	395.3	395.8	394.8	394.8	395.9	397.5	397.0
16	400.21	398.7	397.0	404.2	398.2	396.0	395.4	394.8	394.8	395.8	397.2	400.4
17	399.76	399.0	397.0	402.8	398.0	396.6	395.2	394.8	394.8	395.7	397.0	402.8
18	398.96	398.9	396.8	401.2	398.0	396.5	395.1	394.8	394.8	395.4	397.0	401.6
19	398.61	398.8	396.9	400.6	398.0	396.2	395.0	394.8	394.8	395.1	401.7	400.3
20	398.96	398.8	397.0	399.2	397.9	396.0	395.0	394.8	394.8	400.6	399.3	398.5
21	400.16	399.9	397.0	398.6	397.9	395.5	395.0	396.1	394.8	400.6	398.2	396.9
22	402.91	402.4	397.0	399.2	397.9	395.4	396.2	396.6	394.8	398.2	398.3	397.0
23	404.36	402.4	396.8	399.1	397.8	395.4	395.0	395.5	396.7	397.6	398.4	397.4
24	407.66	399.9	397.0	398.9	398.6	395.6	395.0	394.8	396.3	397.4	398.2	399.2
25	405.66	399.8	396.8	398.7	398.2	395.8	394.9	394.8	395.7	397.0	398.3	398.2
26	401.06	400.0	396.7	398.6	398.0	395.6	395.1	394.8	395.1	396.6	398.3	396.9
27	400.36	399.9	401.6	......	400.4	395.4	395.0	394.8	394.8	395.7	398.7	396.8
28	399.81	399.9	406.0	......	400.0	395.2	394.9	394.8	394.8	396.0	399.1	397.0
29	398.26	......	404.3	......	399.6	395.0	395.0	394.8	394.8	395.9	399.3	397.6
30	398.76	......	403.1	397.1	399.2	396.2	394.9	394.8	394.8	397.0	399.4	398.7
31	398.81	......	403.7	......	399.2	......	397.9	394.8	......	397.4	......	400.2

Current Meter Discharge Measurements of Mohawk River at Black River Railroad Bridge, Utica, N. Y.

DATE.	Hydrographer.	Gage height.	Elevation of water-surface.	Width.	Area of section.	Mean velocity.	Discharge.
1905.		*Feet.*		*Feet.*	*Square feet.*	*Ft. per second.*	*Second-feet.*
Aug. 16	C. A. Poole	7.5	402.3	118.7	1,710	1.96	3,351
Sept. 1	C. A. Poole	1.7	395.8	114.5	1,016	0.58	586
Sept. 22	C. A. Poole	2.95	397.76	117.7	1,161	0.80	929
Nov. 1	C. A. Poole	5.9	400.7	118.3	1,505	1.65	2,490
Nov. 10	C. A Poole	4.5	399.3	118.0	1,340	1.18	1,579

STARCH FACTORY CREEK NEAR NEW HARTFORD, N. Y.

Starch Factory creek is tributary to the Mohawk, near Utica, N. Y. Its drainage basin, which includes Graefenburg creek and reservoir, is shown on the Utica sheet of the United States Geological Survey topographic atlas, from which the following drainage areas have been taken:

Drainage areas of Starch Factory Creek.	Square miles
Above Graefenburg reservoir dam *	0.45
Above gaging weir	3.40
Above Savage reservoir dam	3.81
Above mouth	6.60

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* The yield is developed from this area by tiling from springs.

The region tributary to Starch Factory creek consists of cleared farm land, chiefly sodded slopes, rising from the stream to the divide on either side in a distance of about a mile from the main stream, which flows in a gulf 300 feet below the level of the general plateau. A few small lateral creeks drain the more remote portions of the area.

A gaging weir was erected on this creek above the head of the former Savage reservoir May 26, 1903. The weir has a horizontal iron crest 6 feet in length, with end contractions. The weir gage is placed 6 feet up-stream from the weir and is observed twice daily. The discharge is calculated by the Francis formula. In extreme freshets the discharge is observed at the masonry intake dam, a short distance down-stream.

The gaging record has been furnished by courtesy of the Consolidated Water Co., of Utica, N. Y.

*Mean Daily Discharge, Second-feet, of Starch Factory Creek at Savage Reservoir, near New Hartford, N. Y.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	3.27	1.41	.97	5.0	1.41	1.29	2.34	.47	.39	1.01	1.53	5.95
2	2.65	.97	.97	4.45	4.82	1.29	1.41	.39	.31	.91	1.35	2.72
3	2.34	.86	1.29	5.57	31.0	1.29	1.06	.47	.39	.64	1.17	2.34
4	3.76	.97	4.28	13.95	5.38	1.06	2.34	.47	.39	.43	1.06	1.78
5	5.38	1.06	2.06	16.56	12.43	.86	1.29	.47	.31	3.76	.97	1.78
6	3.59	.97	5.19	11.47	4.28	.86	.86	.47	.31	1.92	.97	5.47
7	2.95	.97	2.5	6.75	3.59	.86	.75	.47	.31	4.64	.86	5.28
8	2.34	.97	2.06	6.97	2.65	2.34	.64	.47	.31	1.41	.75	2.20
9	2.2	1.06	2 5	4.64	2.65	2.06	2.8	.39	.31	1.35	.75	1.53
10	2.06	.97	2.06	18.76	2.5	3.43	2.34	.39	.31	1.23	1.29	1.85
11	1.92	.97	1.29	34.2	1.78	1.78	2.06	.39	.31	1.71	1.53	1.71
12	2.34	.97	1.29	31.8	1.53	1.17	1.06	.39	.31	1.59	1.99	1.41
13	2.2	1.06	1.29	27.8	3.93	.86	.96	.39	.31	1.23	1.92	1.29
14	1.78	1.29	1.29	32.5	4.82	.86	.75	.39	.39	1.01	2.06	1.53
15	2.2	1.17	1.06	46.0	2.5	.75	.64	.39	.31	.86	1.78	13.45
16	3.93	1.06	.97	13.95	1.78	3.59	.64	.31	.31	.75	1.85	7.61
17	2.95	1.06	.97	7.61	1.53	3.27	.86	.31	.31	.75	2.2	3.59
18	2.95	1.17	1.06	5.	2.06	1.78	.75	.31	.31	.75	†133.	2.2
19	2.65	1.17	1.06	4.28	1.53	1.41	.75	.31	.31	.75	12.19	1.47
20	2.65	1.41	1.06	3.27	1.29	1.06	.64	.64	.31	10.4	7.19	1.29
21	83.4	35.8	1.06	2.95	1.06	1.06	.56	.64	.47	3.1	13.19	1.59
22	51.0	8.69	1.06	5.0	.86	.86	.47	.47	.47	1.85	7.82	1.71
23	70.7	4.28	.86	3.1	.86	.86	.39	.39	.86	1.47	5.38	1.47
24	17.2	6.97	.86	2.65	.75	.86	.39	.39	.64	1.23	4.45	1.29
25	4.28	8.25	.97	2.5	.86	.75	.39	.39	.47	4.64	3.27	1.23
26	2.65	4.64	4.64	2.06	.75	.75	.39	.31	.39	1.99	3.35	1.06
27	2.2	2.06	150.6	1.78	58.3	.64	.39	2.65	.47	1.47	4.45	1.06
28	1.78	1.41	13.45	1.53	6.15	.56	.39	.64	.39	1.99	6.05	1.17
29	1.06	......	17.37	1.41	3.93	.86	.39	.47	.39	1.85	3.67	1.35
30	1.06	......	31.7	2.06	2.95	1.41	.47	.39	1.29	1.48	3.51	2.8
31	1.78	......	17.0	......	1.65	......	.47	.39	......	1.53	....	54.7
Mean	9.43	4.06	8.86	10.85	5.37	1.35	.95	.5	.41	1.93	7.47	4.38

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* Not including diversion from drainage basin of Graefenburg creek.

† Approximate.

Monthly Discharge of Starch Factory Creek at Savage Reservoir, near New Hartford, N. Y.

[Drainage area, 3.4 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.				RUN-OFF.	
	Maximum.	Minimum.	Mean.	Corrected mean.†	Second-feet per square mile.	Depth in inches.
1906.						
January	83.4	1.06	9.46	10.20	3.	3.45
February	55.8	0.86	4.06	4.83	1.42	1.48
March	150.6	0.86	8.86	9.63	2.83	3.25
April	46.0	1.41	10.85	11.62	3.42	3.82
May	53.3	.75	5.37	6.14	1.8	2.07
June	3.59	.56	1.35	2.12	.623	.698
July	2.8	.39	.95	1.72	.506	.581
August	2.65	.31	.5	1.27	.373	.429
September	1.29	.31	.41	.48	.141	.158
October	10.4	.43	1.93	2.60	.76	.874
November	133.0	.75	7.71	8.48	2.49	2.79
December	54.7	1.06	4.38	5.15	1.51	1.73
The year	....	....	......	....	....	21.36

Precipitation at Savyge Reservoir, near New Hartford, N, Y.

DAY.	Jan.	Feb.	Mar.	April.	May.	June	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	*.06	.09					.62				*.02	
2	.02	*.03					.02					*.04
3					1.23			.05	.2			*.65
4	*.5	*.07	.93		.1		.4	.34	.18			*.08
5	.17	*.14	*.03	.45	.43		.3	.22		.92		*.04
6		*.06		*.24	.04	.23		.18		.15		.77
7	*.11			*.04		.14		.18		1.05		.05
8	*.03			*.01		.05				.14		
9		*.05	*.06		.08	.71	1.31					*.06
10		*.18		*.8	.03	.02	.11			.53	.21	*.22
11			*.22	.16		.81	.27	.1		.22	.16	.4
12	.13			.07					.11	.34	.63	
13					.11						*.17	
14		* 05			.61				.32		*.19	
15	*.04	*.2		.45								*.06
16			*.26	.03		.62					*.5	*.1
17	*.14					.23	.25					
18	*.23		*.04		.18	.35	.12				*.02	
19		*.05				.2						
20	*.12		*.46					.02		1.6		*.01
21	*.06	*.21	*.1			.18		1.1	.62		.06	*.35
22			*.03	.41			.14		.12		.31	
23			*.06			.24	.11		.91	.13	.07	
24	.79					.1	.03		.16		*.09	
25					.03					.35		
26		*.24										*.06
27		*.04			1.7			.21	.3		.14	
28			.27		.57		.02	.51		.26	.15	*.15
39					.03	.3				.14	.14	
30			.07	.23		.41	.17		.47	.11		
21	.02		.81				.25			.18		
Total	2.43	1.41	3.34	2.89	5.2	4.59	4.13	2.91	3.39	6.12	2.86	2.47

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* Snow.

† Includes diversion from Graefenburg creek.

GRAEFENBURG CREEK NEAR NEW HARTFORD, N. Y.

This small catchment basin, having an area of 0.282 square miles, consists of cleared farm land, chiefly meadow and pasture, and lies between elevations 1,100 and 1,300 feet above tide, near the summit of the general plateau south of Mohawk river. The geologic strata backward from the Mohawk in this region are, successively, the Hudson river shale, Medina sandstone and Clinton limestone. The Hudson river shale yields few permanent springs and but little ground water. The Graefenburg basin lies above the shale and a large part of its water is derived from springs, probably in the Clinton series, which are supplied from points outside the topographic basin and the yield of which has been developed by tile drainage. The measured discharge exceeds the precipitation on the basin. Sylvan Glen creek, an adjacent drainage basin at a lower level and entirely within the Hudson river shale, sometimes becomes entirely dry in summer.

A gaging weir was erected above the inflow to Graefenburg reservoir June 7, 1903, and a standard rain gage was placed on the adjoining meadow slope, some distance from trees and structures. The weir is compound in form and has a crest length of 5 feet, with two end contractions and a central notch 2 feet long, 0.21 foot deeper. The discharge is calculated by the Francis formula. The flow of the stream is very steady. The gages are read by Richard Owen and the record is furnished by the Consolidated Water Company, of Utica, N. Y.

Mean Daily Discharge, Second-feet, of Graefenburg Creek, near New Hartford, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	1.24	1.1	.91	2.22	*	1.38	1.49	1.1	1.05	1.0	1.05	1.81
2	1.19	1.0	.91	1.92	......	1.38	1.29	1.0	1.05	1.0	1.05	1.33
3	1.19	.91	1.1	2.45	......	1.38	1.29	1.14	1.1	1.0	1.0	1.29
4	1.49	.91	1.54	7.64	......	1.38	1.54	1.14	1.0	1.0	1.0	1.29
5	1.33	.96	1.43	2.72	......	1.38	1.33	1.1	1.0	2.04	1.0	1.19
6	1.19	.91	1.98	2.65	......	1.43	1.29	1.1	1.0	1.38	1.0	10.66
7	1.14	.91	.91	2.27	......	1.38	1.24	1.14	1.0	1.76	.96	1.76
8	1.19	.91	1.43	2.27	......	2.1	1.19	1.14	1.0	1.14	.96	1.29
9	1.1	1.0	1.19	1.92	......	1.49	1.81	1.1	1.0	1.38	1.0	1.29
10	1.0	.96	.96	3.06	......	1.54	1.49	1.1	1.0	1.19	1.05	1.38
11	1.0	.91	.91	4.64	......	1.43	1.29	1.1	1.0	1.33	1.1	1.29
12	1.19	.91	.91	4.26	......	1.33	1.19	1.05	1.0	1.24	1.19	1.19
13	1.05	.96	.88	2.92	......	1.29	1.19	1.05	1.0	1.1	1.19	1.1
14	1.0	1.0	.88	2.79	......	1.29	1.11	1.1	1.0	1.05	1.19	1.05
15	1.05	.91	.85	4.72	......	1.29	1.1	1.05	1.0	1.0	1.19	4.1
16	1.7	.91	.85	2.45	......	1.76	1.1	1.05	1.0	1.0	1.19	1.81
17	1.33	.91	.85	2.04	......	1.65	1.19	1.05	1.0	1.0	1.19	1.43
18	1.19	.91	.85	1.87	......	1.6	1.19	1.05	1.0	1.0	4.41	1.24
19	1.14	.91	.88	1.81	......	1.43	1.14	1.05	1.0	1.0	2.16	1.1

* No record.

Mean Daily Discharge, Second-feet, of Graefenburg] Creek, near New Hartford, N. Y.—Concluded.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
20	1.1	1.38	.91	1.7	......	1.33	1.1	1.29	1.1	2.27	1.6	1.05
21	4.95	5.69	.91	1.65	......	1.33	1.1	1.14	1.05	1.29	4.88	1.24
22	4.1	1.7	.91	1.92	......	1.33	1.0	1.05	1.0	1.19	1.81	1.19
23	6.44	1.43	.91	1.7	......	1.33	1.1	1.05	1.29	1.14	1.6	1.14
24	1.81	1.65	.91	1.6	......	1.29	1.1	1.05	1.05	1.05	1.49	1.19
25	1.29	1.98	.96	1.54	......	1.29	1.0	1.05	1.0	1.7	1.38	1.1
26	1.19	1.43	1.24	1.54	......	1.24	1.1	1.05	1.0	1.05	1.38	1.14
27	1.1	1.19	12.61	1.49	......	1.19	1.1	1.38	1.14	1.0	1.54	1.19
28	1.1	1.0	2.86	1.49	......	1.24	1.1	1.14	1.0	1.05	1.7	1.19
29	1.0	......	2.1	1.49	......	1.29	1.1	1.1	1.0	1.1	1.33	1.24
30	1.05	......	4.8	1.6	......	1.33	1.1	1.1	1.19	1.1	1.29	1.65
31	1.1	......	2.27	......	......	......	1.1	1.05	......	1.1	......	7.84
Mean	1.58	1.26	1.66	2.48	......	1.4	1.21	1.1	1.03	1.21	1.5	1.9

Precipitation at Graefenburg Reservoir, near New Hartford, N Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.					*a*							
1	.03	.06	......	......	......	......	.91	......	......	T	......	*.02
2	.01	.01	......	......	......	......	.02	......	......	......	......	*.01
3	......	T	......	......	......	......	......	.02	.04	......	......	*.04
4	.51	T	.38	......	......	......	.33	.44	.17	......	......	*.01
5	.14	.11	.01	.42	......	......	.19	.04	......	......	......	.57
6	T	.02	......	.23	......	.12	......	.12	......	.12	......	.08
7	.06	......	......	.01	......	.11	......	.17	......	1.01	......	......
8	.01	......	T	.01	......	......	......	T	......	.04	......	*.04
9	......	.03	......	......	......	.6	.62	......	......	T	.18	*.09
10	......	.11	.04	.76	......	......	.12	......	......	.38	*.05	*.49
11	......	......	T	.15	......	.43	.3	.02	......	.17	*.61	T
12	.09	......	.21	.05	......	......	......	......	......	*.19	*.04	......
13	......	......	......	T	......	......	......	......	......	......	*.1	......
14	......	.03	......	......	......	......	......	......	.14	......	......	.4
15	.03	.15	......	.41	......	......	......	......	......	......	*.39	.07
16	......	......	.16	.02	......	.67	......	......	......	......	......	......
17	.05	......	T	......	......	.09	.13	......	......	......	.01	......
18	.07	......	.01	......	......	.3	.08	......	......	......	......	......
19	......	.03	......	......	......	.2	......	......	......	......	......	*.02
20	.08	......	.39	......	......	......	......	.01	......	1.55	.05	*.33
21	......	......	.03	......	......	.1	......	.6	.5	......	.2	......
22	......	.18	.01	.34	......	......	.1	T	.02	......	*.02	......
23	......	......	.03	......	......	.19	.03	......	.6	.02	*.03	......
24	.55	......	T	......	......	.04	.01	......	.17	T	T	......
25	......	......	......	......	......	......	......	......	......	.34	T	......
26	......	.09	......	......	......	......	......	......	......	......	.07	......
27	......	.01	.25	......	......	......	......	.12	.34	......	.11	......
28	......	......	......	......	......	......	T	.69	T	.16	*.11	......
29	......	......	......	......	......	.26	.01	......	......	*.04	......	......
30	......	......	.05	.24	......	.25	.08	......	.42	*.02	T	......
31	.01	......	.75	......	......	......	.24	......	......	*.05	......	......
Total	1.64	.82	2.32	2.64	......	3.36	3.17	2.23	2.4	4.09	1.77	2.17

* Snow. *a* Record lost.

SYLVAN GLEN CREEK NEAR NEW HARTFORD, N. Y.

New Hartford, or Sylvan Glen creek is the inflowing stream tributary to reservoir No. 4 of the Utica Water-works. The stream consists of two main branches, the larger flowing in a deep-cut, wooded, shale valley, the smaller draining a shallow ravine and a marshy divide. The drainage basin, which lies at an elevation of from 700 to 1,500 feet above tide, is shown on the Utica and Oriskany sheets of the United States Geological Survey topographic atlas. It comprises chiefly woodland and pasture, with some tillage and is 1.18 square miles in extent. The flow of this stream became very small in May, 1903, and it may cease altogether at times.

The weir now used, which is located at the mouth of the stream, was erected in January, 1904, by the Consolidated Water Company, of Utica, N. Y., by whom the record is furnished. The weir has a main crest 6 feet long, with two end contractions, and a central low-water notch, 2 inches deep and 2 feet long, making a total length of 8 feet. The gage is placed 6 feet up-stream and is read twice daily by John Adrean.

Mean Daily Discharge, Second-feet, of Sylvan Glen Creek at No. 4 Reservoir, near New Hartford, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	1.06	.86	.21	3.13	.31	.31	.38	.04	.04	.46	.71	1.34
2	.76	.56	.15	2.42	3.34	.24	.15	.04	.04	.27	.44	.86
3	.66	.34	.24	3.13	7.74	.18	.1	.1	.04	.12	.38	.71
4	1.16	.27	2.75	6.26	2.75	.15	.27	.1	.04	......	.32	.61
5	1.42	.24	.96	4.59	6.75	.15	.15	.08	.04	1.26	.31	.56
6	.96	.18	.76	4.8	2.09	.15	.05	.1	.02	.56	.29	2.67
7	.76	.18	.66	3.54	1.06	.18	.05	.05	......	1.92	.22	2.34
8	.66	.18	.56	2.59	.86	2.42	.05	.05	......	.31	.2	.81
9	.66	.21	.76	1.92	.86	.42	7.25	.04	......	.42	.16	.61
10	.46	.21	.56	10.2	.66	11.08	1.16	.04	......	.46	.29	.51
11	.42	.18	.42	9.32	.42	.56	.76	.05	......	.42	.61	.51
12	.76	.21	.38	6.26	.42	.31	.34	.04	......	.34	1.42	.4
13	.76	.21	.34	4.38	2.26	.18	.15	.04	......	.21	1.11	.34
14	.56	.21	.27	4.17	1.59	.12	.15	.04	......	.15	.91	.34
15	.56	.21	.24	9.32	.76	.1	.1	.04	......	.1	.86	6.75
16	1.42	.18	.24	2.59	.42	.42	.1	.04	......	.1	.86	3.44
17	1.16	.21	.18	1.92	.34	.46	.15	.04	......	.1	.81	1.82
18	1.16	.21	.18	1.26	.56	.42	.12	.02	......	.08	12.26	.91
19	.96	.18	.15	.96	.27	.27	.1	......	......	.08	4.17	.56
20	.76	.27	.15	.96	.21	.15	.05	......	......	3.97	2.09	.4
21	11.08	10.2	.15	.76	.18	.21	.05	.05	......	.86	3.97	.51
22	11.67	2.42	.15	1.59	.12	.15	.05	.04	......	.42	2.42	.51
23	14.19	1.42	.12	.96	.1	.15	.05	.04	.1	.38	2.0	.4
24	6.75	2.09	.12	.66	.1	.12	.05	.04	.05	.34	1.34	.29
25	2.42	2.42	.1	.42	.1	.1	.05	.04	.04	1.76	1.16	.22
26	1.42	2.09	.12	.34	.1	.1	.04	.04	.04	.46	1.11	.21
27	.96	.76	23.94	.27	13.84	.05	.04	.27	.04	.34	1.5	.22
28	.76	.34	4.38	.27	1.76	.05	.05	.05	.02	.76	2.42	.24
29	.56	......	1.92	.21	1.16	.1	.04	.04	......	.86	1.34	.24
30	.56	......	6.75	.42	.66	.21	.04	.04	.1	.86	.91	.38
31	.96	......	3.97	......	.42	......	.04	.04	......	1.16	......	17.69
Mean	2.17	.97	1.67	2.99	1.68	.65	.39	.05	.02	.63	1.55	1.53

Monthly Discharge of Sylvan Glen Creek, near New Hartford, N. Y.

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1906.					
January	14.19	0.42	2.21	1.87	2.16
February	10.20	.18	.97	.822	.86
March	23.94	.10	1.67	1.42	1.64
April	10.20	.21	2.99	2.53	2.82
May	13.84	.10	1.68	1.42	1.64
June	11.08	.05	.65	.551	.61
July	7.25	.04	.39	.330	.38
August	.27	.00	.05	.042	.05
September	.10	.00	.02	.017	.02
October	3.97	.00	.63	.534	.62
November	12.26	.16	1.55	1.31	1.46
December	17.69	.21	1.53	1.30	1.50
The year	23.94	.00	....	....	13.76

Precipitation at Deerfield Reservoir, near Deerfield, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	*.06	*.07					1.05					.05
2	T	*T				T	.02					*.02
3		*T			1.27			.16	.27			*.07
4	*.50	*.04	* 48		.05		.22	.31	.01			*.06
5	T	.12	*.01	.33	.38		.13	.01		.96		*.59
6	*.02	.05		*.15	T	.16		.06		.05		*.08
7	*.01			*T		.19		.24		.63		
8	T		*T			.10		.01		.06		*.03
9		*.06			.09	.34	.68					*.07
10	*.02	*.14	*.04	.23	T	.02	.18			.38	.24	*.32
11				.13		.71	.46	.01		.46	.10	
12	.24		.23	.05				.31	T	.17	.69	
13				T	.02						*.70	
14		*.05	*T		.67				.19		*.08	
15		*.14		.35								.76
16		*T	*.18	.04		.37					*.32	*.06
17	*.05		*.01			.13	.15					
18	*.07		*.02		.21	.30	.07				.07	
19	*.01	*.06				.06			.50			
20	.07		*.22					.04	T	1.56		*.07
21		.03	*.02			.21		1.67	1.42		.07	*.26
22		.15	*.02	.40		T	.07		.01		.14	
23			*.01			.05	.01			.05	.06	*T
24	*.56		*T			.12	T				*.04	
25										.26		*T
26		.31									.03	*T
27		*.02	.03		1.52			.09	.21		.21	
28			.25		.18		T	.49		.28	.19	*.18
29					T	.43	.02			.05	*.26	
30			.05	.08		.33	.06		.51	.11		
31	.06		.35				1.07			.06		.02
Total	1.67	1.24	1 92	1.76	4.39	3.52	4.19	3.40	3.12	5.08	3.20	2.64

* Snow.

GRAEFENBURG HYDROPHYSICAL STATION NEAR UTICA, N. Y.

GENERAL DESCRIPTION.

This station is located near Graefenburg reservoir, near Utica, about 4 miles south from the Mohawk river, and at altitude 1,100 feet above tide. The instruments are placed in a rectangular enclosure 30 by 50 feet in extent on a grass plat sloping moderately to the northwest. The location of the instruments within this plat is shown in the accompanying sketch, Fig. 1. Three maple trees, each about 24 inches in diameter, stand at a distance of about 30 to 50 feet southeast of the enclosure and at a distance of 30 feet farther is one side of a thrifty orchard. To the south, open meadow extends to a considerable distance, with the exception of a light wire fence and row of small trees 60 to 70 feet from the enclosure and parallel to its side. To the north is a small garden patch, beyond which the ground slopes rapidly into a ravine occupied by Graefenburg reservoir, which is formed by an earthen dam, situated about 200 feet from the enclosure on the northwest.

The instrumental equipment is as follows: In the instrument shelter are placed a Green standard thermometer, also Green maximum and minimum thermometers; a Lambrecht hair hygrometer; and a 4½-inch Queen aneroid barometer, which has been calibrated by comparison with a standard mercurial barometer.

A hair hygrometer has been used in preference to a wet bulb thermometer, as it is considered more reliable in the hands of an ordinary observer for use in the winter time. It is periodically compared with a standard wet and dry bulb, or sling psychrometer, and the bundle of hairs is moistened on the first of each month to insure their retention of hygroscopic power.

A standard 8-inch rain gage, United States Weather Bureau pattern, having its rim 4.5 feet above ground is used; also a Robinson anemometer, United States Weather Bureau pattern, made by Julien P. Frieze, having its cups at the same altitude. The anemometer readings are taken directly from the dial twice each day, and the total wind movement is deduced by a reduction table based on Marvin's experiments.

Two Green soil thermometers, having their bulbs inserted in the natural soil beneath the grass sod, one to 2 inches and the other to 24 inches depth, are also used.

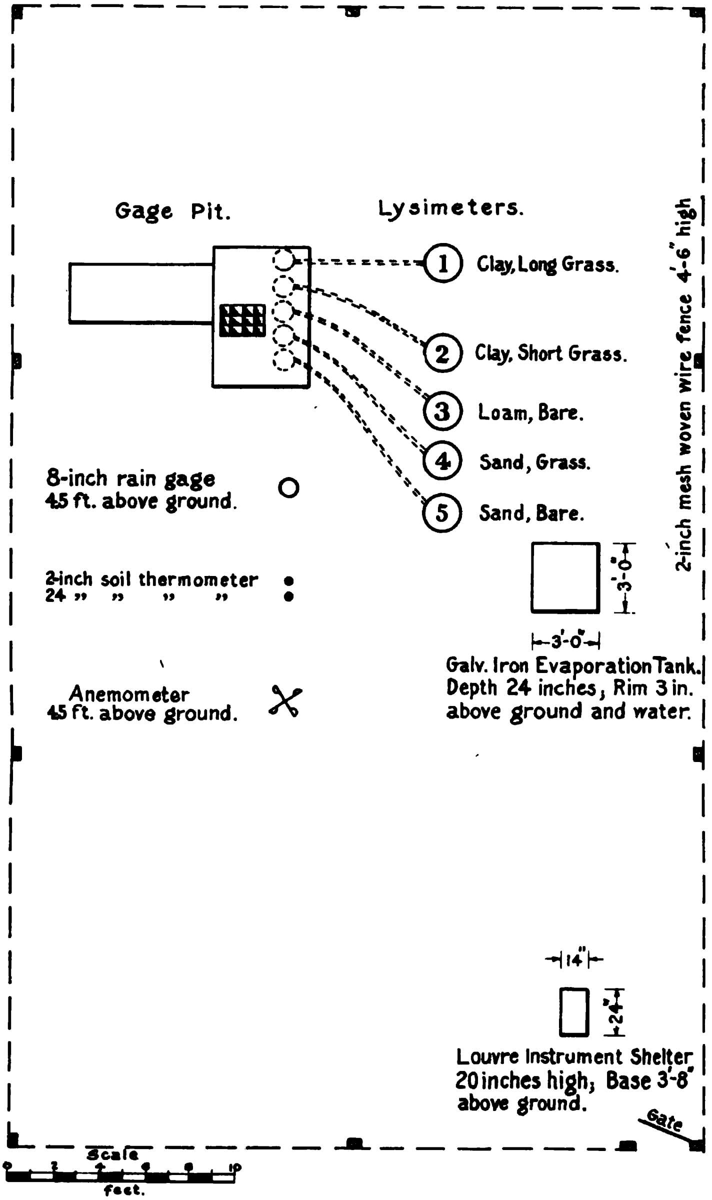
During the summer season, the evaporation from free water-surface is measured by means of a rectangular tank 3 feet square and 2 feet deep, buried in the soil to within 3 inches of the top. A brass needle projects in the center to within 3 inches of the top. The evaporation is determined each morning by means of a standard brass cup of 212 cubic centimeters capacity. One cupful represents 0.01 inch depth on the surface of the tank. The observer records the number of cupfuls added or removed each morning, in order to raise or reduce the water-level to the needle point. The standard evaporation tank is not used in the frozen season.

During the season of 1904-5 an effort was made to determine the evaporation from ice, and for this purpose a galvanized iron pan, one foot square and 4.5 inches deep, inside measurements, was used. The pan was filled to the brim with water, set in an exposed position at a height of about 3 feet above the ground, and allowed to freeze, it being the intention to have the pan so exposed that the temperature of the ice would follow that of the air as closely as possible. The pan was weighed when set. Snow falling on the surface was brushed off. It was again weighed before each rainfall or thaw, and the evaporation was determined from the difference in weight. The record was interrupted during the periods of rainy or thawing weather.

On December 1, 1904, two lysimeters were in place. Two additional lysimeter records were begun June 25, 1905, and another August 12, 1905. The lysimeters are galvanized iron tanks with wrought bands, as shown in fig. 2. They were filled by placing the tank (with the cover, which fits over the bottom, removed), upright on the ground, and driving the can downward over a prism of soil, digging away at the sides as much as necessary in order to drive the can downward with a heavy hammer. After the can had been driven downward over a prism of soil to its full depth, the soil was dug away around the bottom, a temporary bottom inserted, and the tank and its contained soil were lifted sufficiently to enable the conical bottom to be put in position. The

Fig. I.

Graefenburg Hydrophysical Station
near Utica, N.Y.



Sketch showing location of Instruments.

lysimeter was then placed upon a wooden foundation, and connected with the gage cans in the adjoining pit by means of a short ½-inch lead pipe. The first two cans installed were filled in this manner with soil *in situ,* which is a heavy clay, formed by disintegration of Utica shale, which lies at a depth of a few feet underneath the surface. Both lysimeters were left with the natural sod surface until August 1, 1905, after which date the grass growing on the second lysimeter has been cut short. Number 3 lysimeter was filled in the same manner with soil comprising a sandy loam surface soil to about 18 inches in depth, and beneath this heavy clay, similar to that in the first two lysimeters.

Numbers 4 and 5 were filled with a medium coarse, rather humus and open said, found at a distance of about one mile from the station. These lysimeters, after being filled in the manner previously described, were closed at both ends and drawn to the station. When filling in the above described manner, an effort was made to obtain samples of the different soils in an undisturbed natural condition.

In order to determine the voids in the different soils, samples were taken in galvanized cans, 0.535 foot diameter and one foot deep, by inverting and driving these cans downward in a manner similar to that used in filling the lysimeters. Mechanical analyses have also been made, and the results of these are given in the accompanying tables.

Mechanical Analyses of Soil Samples by U. S. Department of Agriculture.

Number.	CHARACTER OF SOIL.	Corresponds to soil in Lysimeter, Number—	Total percentage, clay and silt	PERCENTAGE OF SAMPLE, HAVING SIZES OF CONSTITUENTS IN MILLIMETERS AS BELOW.						
				Fine gravel, 1 to 2 mm.	Coarse sand, 1 to 0.5 mm.	Medium sand, 0.5 to 0.25 mm.	Fine sand, 0.25 to 0.1 mm.	Very fine sand, 0.1 to 0.05 mm	Silt, 0.05 to 0.005 mm.	Clay, 0.005 to 0.0 mm.
6	Clay loam	1 and 2, surface foot..........	62.5	1.9	6.3	4.0	14.4	10.8	35.2	27.3
7	Clay loam	1 and 2, bottom foot..........	62.3	2.0	6.4	4.4	15.3	9.6	33.6	28.7
8	Clay loam	3, surface foot...	84.7	.3	1.2	.3	2.4	10.3	71.0	13.7
9	Sandy subsoil.	3, bottom foot..	31.6	2.5	5.6	10.9	38.0	11.3	19.0	12.6
10	Sand.....	4 and 5, middle..	24.8	.5	13.9	29.3	28.5	2.6	11.7	13.1

Tests to Determine Voids and Initial Saturation of Soils in Lysimeters.

Sample No.	1	2	3
Lysimeter No	1 and 2	1 and 2	3 and 4
Position	Surface foot.	Bottom foot.	Medium.
Gross weight, sample and can, pounds	24.43	27.44	20.19
Weight of can, pounds	2.03	1.62	1.72
Net weight, sample as taken, pounds	22.40	25.82	18.47
Number days sample was dried	64	64	....
Gross weight, after drying, pounds	19.31	23.94	16.50
Net weight, after drying, pounds	17.28	22.32	14.78
Loss of weight by drying, pounds	5.07	3.50	3.69
Equivalent, cubic inches of water	140.4	96.95	102.2
Volume of sample, cubic inches	386.0	361.9	321.4
Initial saturation, per cent of volume	36.4	26.5	31.8
Weight of equivalent volume, solid soil, pounds	37.34	35.02	31.04
Difference from weight, dried sample, pounds	20.06	12.70	16.26
Equivalent, cubic inches of soil	206.8	131.3	163.0
Volume of sample, cubic inches	386.0	361.9	321.4
Voids, per cent volume of sample	53.6	36.3	50.7

In these calculations the following constants have been used;

1 pound of water = 27.7 cubic inches.

Specific gravity, soil matter = 2.68.

Weight of one cubic inch of water = 0.0361 pound.

Weight of one cubic inch of soil matter = 0.0967 pound.

The difference between the computed voids for samples Nos. 1 and 2 is probably due to the loosening influences which operate near the surface of the soil. The sand, sample No. 3, did not show on examination any evidence of earth worm or root perforations, and the computed voids of this sample are so large as to be open to doubt.

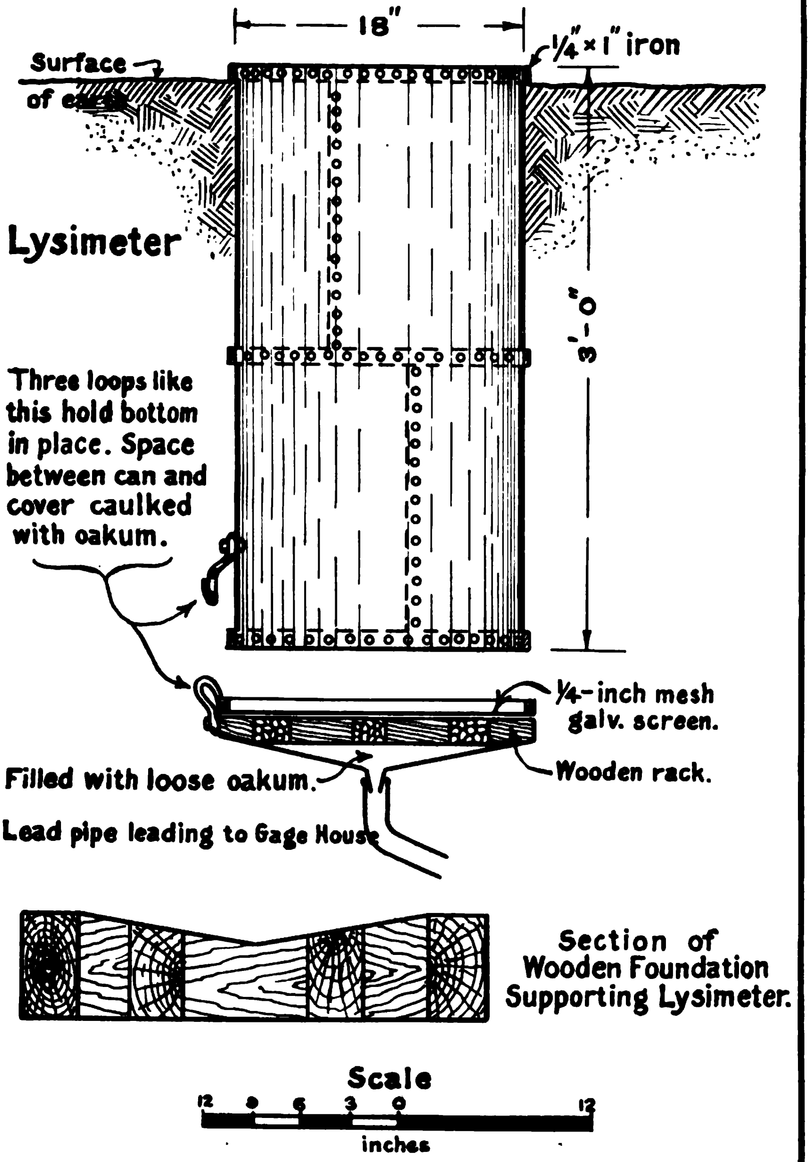
The facility with which water is transmitted through the soil varies directly as the percentage of voids and inversely as the percentage of fine constituents.

In the gage-pit are placed galvanized cans, one foot diameter and one foot deep, with close-fitting covers. Within these are smaller galvanized cans, made very accurately, each 0.535 foot inside diameter, and having a notch in one side, into which the drainage from the lysimeter is conducted through a short section of rubber hose, connected with the lead pipes described.

The smaller gage cans have a sectional area one-tenth that of the surface area of the lysimeters. The depth of the percolation is multiplied ten times in these cans. Care is taken to set the cans level, and the depth of percolation is measured by means of an ordinary rain gage stick.

Fig. 2.

Graefenburg Hydrophysical Station
near Utica, N.Y.


18"
1/4" × 1" iron
Surface of earth
Lysimeter
3'-0"
Three loops like this hold bottom in place. Space between can and cover caulked with oakum.
1/4-inch mesh galv. screen.
Wooden rack.
Filled with loose oakum.
Lead pipe leading to Gage House
Section of Wooden Foundation Supporting Lysimeter.
Scale
12 9 6 3 0 12
inches

Sectional Elevation of Lysimeter.

In case of overflow from the small can into the larger can between two readings, the toal amount is measured by successive fillings of the small can. If the rate of infiltration is slow, the water is left in the small can until it becomes nearly full. This is done in order to avoid, if possible, an error in measuring a very small quantity from the gage cans.

The results of the records kept to the end of the year 1906 are given in the accompanying tables. All instruments are read at morning and night. The results are reduced to a meteorological day extending from A. M. reading of the calendar day to the A. M. reading of the following day. The means for the meteorological day are deduced as follows: for the barometer and soil thermometers, the average of the A. M. and P. M. readings of the calendar day is used; for the standard air and water thermometers, one-fourth of the sum of the A. M. plus twice the P. M., plus the following A. M. reading, is used.

The vapor pressure is computed for each of the readings and the mean of the A. M., P. M. and succeeding A. M. results is used. Snow depth is taken on level in an opening in woods one-fifth mile distant from the station. But little snow accumulates on ground at station.

Previous to September, 1905, the depth to ground water was taken in wells in use and is probably too great. Since September, 1905, it has been taken in an unused well located on a slope about one-quarter mile from the lysimeter station. During the period of December 1, 1904, to March 21, 1905, the lysimeter gages were read on Monday mornings only. The record shows the percolation during the preceding week. In the winter of 1904–5 the snow drifted around the lysimeter house owing to nearby obstructions, completely covering the lysimeters, and no doubt causing the excessive percolation observed the following spring.

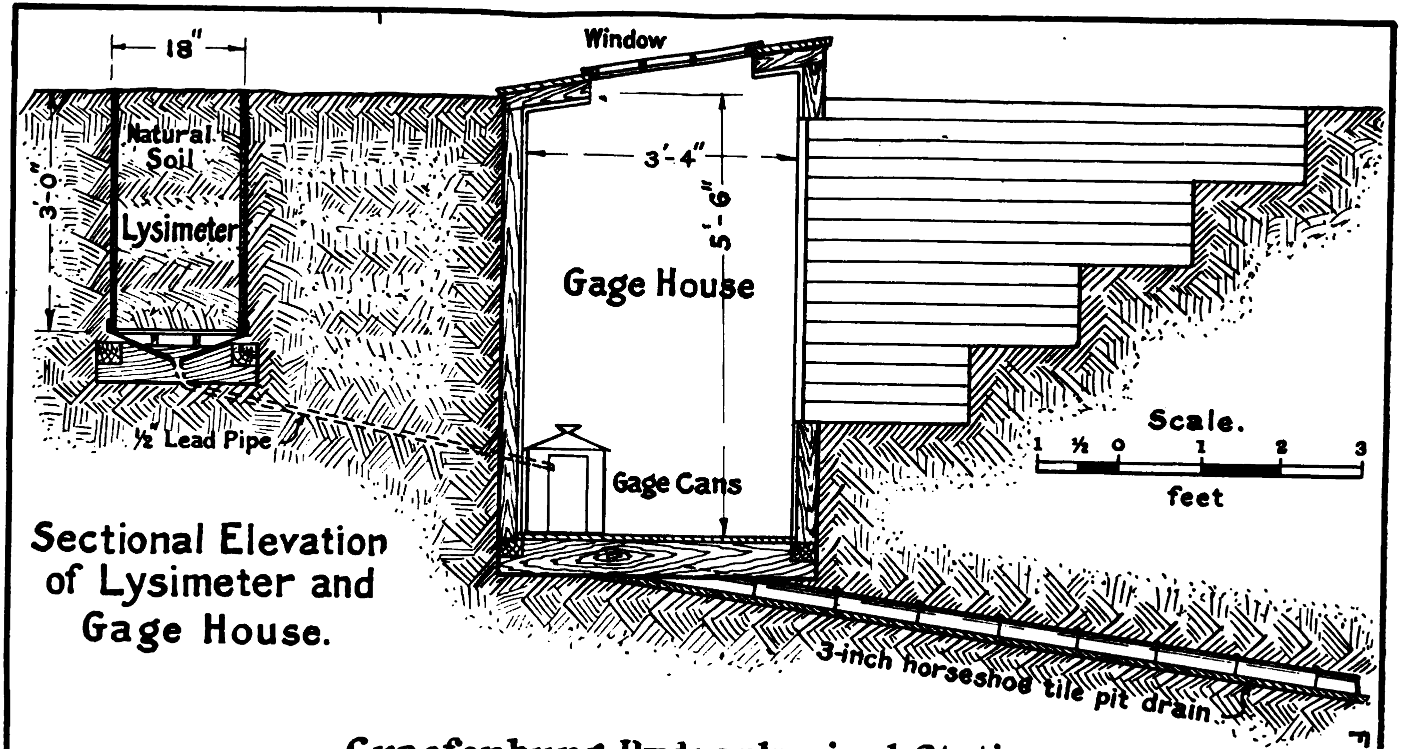
Previous to September, 1905, only the smaller-sized gage cans were in use. The capacity of the small cans is about one inch depth on the lysimeters and whenever the inflow between readings exceeded this amount the overflow was lost. The capacity of one of the large gage cans, subsequently added, is about 3.7 inches depth on the lysimeter, The lysimeters were originally set with the edge about one inch above the soil, both inside and outside. In the fall of 1906, the filling around the lysimeters had settled, standing from two to three inches below the rim of all lysimeters, excepting No. 1. The irregularity of the percolation and lack of any consistent relation to rainfall is to be noted. Ordinary rains will not affect the soil moisture in the bottom of the lysimeters, and if the conditions are suitable, a large amount of water may accumulate in the upper part of the lysimeter before active percolation begins.

During the drought of 1906 the lysimeters showed practically no percolation during the three months, July 16 to October 16. In the meantime 6.10 inches of rain fell. It is probable that the lighter showers did not penetrate below the depth of capillary uplifting and thus a large part of this water was lost in evaporation. With the exception of lysimeter No. 1, the percolation was small from October 16 to November 18, although considerable rain fell. On the last named date there was a heavy percolation through lysimeters Nos. 1, 2 and 3, unaccompanied by rain but following a cessation of freezing weather.

Using the determination of voids previously given, it appears that to completely saturate the soil in lysimeters Nos. 1 and 2, it would require a depth of about 16 inches of water, while for lysimeters Nos. 4 and 5 about 18 inches would be required. The extremely minute capillaries in lysimeters Nos. 1 and 2 will retain a considerable portion of the water required for saturation without yielding any percolation. Furthermore, if the soil is initially dry, the line of moisture will progress downward slowly, but after the soil is moistened any further water-supply will pass quickly downward.

These facts deduced from observations made elsewhere serve to explain the condition here observed at times, the lysimeters failing to respond to moderate rainfalls, but after a heavy rain the percolation is rapid and may exceed the contemporaneous rainfall.

It is to be noted, however, that the lysimeters, especially Nos. 1 and 2, frequently show, according to the observer's reports, a percolation in excess of the precipitation over considerable periods,



Sectional Elevation of Lysimeter and Gage House.

Graefenburg Hydrophysical Station
near Utica, N.Y.

Fig. 3.

leaving nothing for evaporation, and apparently not accountable to a flush-tank action, such as was above described.

This condition in the spring of 1905, has already been referred to. It was repeated after heavy rains in the summer of 1905, and again in the spring of 1906. It is certain that no water enters the surface of the lysimeters excepting direct rainfall. In order to investigate this the lysimeters have been unearthed. It was found that water accumulated under the lysimeters from the surrounding soil probably acquiring sufficient depth and pressure to enter the drain pipe around the rim of the cover, or around the nipple. The bottoms of the lysimeters have since been bedded in cement mortar. The above described conditions pertained, however, throughout all the records here published.

GRAEFENBURG HYDROPHYSICAL RECORDS — (*Continued*).

Month of February, 1905.

DAY.	Total wind movement, 24 hours.	Mean vapor pressure.	Mean air temperature.	Mean water temperature.	Mean of maximum and minimum thermometers.	MEAN SOIL TEMPERATURE.		Mean barometer. *Inches.*	Precipitation. *Inches.*	Evaporation from water. *Inches.*	PERCOLATION THROUGH LYSIMETER. *Inches.*					ACCUMULATED SNOW ON GROUND IN WOODS. *Inches.*		Depth to water in well‡ *Feet.*
						2 inches depth.	24 inches depth.				1 Clay, long grass.	2 Clay, short grass.	3 Clay and loam, bare.	4 Sand, long grass.	5 Sand, bare.	Snow.	Water.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1........	86	.062	11.0	....	12.5	24.8	31.5	28.72	*.04	....	....	....	§	§	§	....	....	....
2........	157	.039	1.8	....	1.5	26.5	31.5	28.55	*.04	....	....	....	....	....	....	....	....	....
3........	149	.030	—3.8	....	—3	27.0	31.5	28.80	....	....	....	....	....	....	....	....	....	....
4........	109	.029	—4.2	....	—3.5	25	31.5	28.96	....	....	....	....	....	....	....	....	....	....
5........	135	.044	6.5	....	10	23	31.5	28.92	*.07	....	....	....	....	....	....	....	....	....
6........	100	.088	16.2	....	12.5	23.5	31.2	28.55	*T	....	0	T	....	....	....	17	5.06	11.2
7........	109	.042	1.2	....	2	25.5	31	28.78	*T	....	....	....	....	....	....	....	....	....
8........	105	.041	11.2	....	14	24.5	31	28.88	*.06	....	....	....	....	....	....	....	....	....
9........	80	.122	24.5	....	29	26.2	31	28.51	*.04	....	....	....	....	....	....	....	....	....
10........	219	.077	16.0	....	12.5	28	31	28.51	*.02	....	....	....	....	....	....	....	....	....
11........	204	.037	2.0	....	2	26.8	30.8	28.94	....	....	....	....	....	....	....	....	....	....
12........	117	.078	15.2	....	28	22.2	29.5	28.48	*.20	....	....	....	....	....	....	....	....	....
13........	130	.045	4.2	....	—0.5	26	30	28.15	*T	....	0	T	....	....	....	20	5.97	11.6
14........	153	.027	4.2	....	9	24.8	30	28.46	*T	....	....	....	....	....	....	....	....	....
15........	†98	.039	4.0	....	—1	24	30	28.58	*T	....	....	....	....	....	....	....	....	....
16........	107	.042	10.2	....	16.5	22.5	30	28.71	*T	....	....	....	....	....	....	....	....	....
17........	99	.084	19.2	....	15	25	30	28.45	*.05	....	....	....	....	....	....	....	....	....
18........	140	.047	6.0	....	4	27	30.5	28.76	*.02	....	....	....	....	....	....	....	....	....
19........	105	.064	15.8	....	21	25.2	30	29.50	....	....	....	....	....	....	....	....	....	....
20........	†75	.129	29.5	....	32	25.5	30.2	28.89	....	....	0	0	....	....	....	22	6.25	12.4
21........	76	.090	20.5	....	23	28.2	30.5	28.90	....	....	....	....	....	....	....	....	....	....
22........	99	.085	21.0	....	26	27	30.5	28.86	....	....	....	....	....	....	....	....	....	....
23........	52	.082	19.5	....	17.5	27	30.5	28.79	....	....	....	....	....	....	....	....	....	....
24........	78	.075	16.5	....	17.5	24.8	30.2	28.72	....	....	....	....	....	....	....	....	....	....
25........	57	.079	22.2	....	25	24.8	30.2	28.39	*T	....	....	....	....	....	....	....	....	....
26........	77	.085	16.5	....	12.5	26.5	30	28.39	*T	....	....	....	....	....	....	....	....	....
27........	97	.060	12.5	....	16.5	25	30	28.48	*T	....	T	T	....	....	....	22.5	7.30	12.8
28........	70	.084	17	....	11.5	26	30	28.42	*.02	....	....	....	....	....	....	....	....	....

* Snow. † Imperfect record. ‡ Well No. 2. § No record.

GRAEFENBURG HYDROPHYSICAL RECORDS—(*Continued*).

Month of March, 1905.

DAY.	Total wind movement, 24 hours.	Mean vapor pressure.	Mean air temperature.	Mean water temperature.	Mean of maximum and minimum thermometers.	MEAN SOIL TEMPERATURE.		Mean barometer. *Inches.*	Precipitation. *Inches.*	Evaporation from water. *Inches.*	PERCOLATION THROUGH LYSIMETER. *Inches.*					ACCUMULATED SNOW ON GROUND IN WOODS. *Inches.*		Depth to water in well† *Feet.*
						2 inches depth.	24 inches depth.				1 Clay, long grass.	2 Clay, short grass.	3 Clay and loam, bare.	4 Sand, long grass.	5 Sand, bare.	Snow.	Water.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1	63	.039	6.2		5	27.20	30	28.56					§	§	§			
2	88	.057	11.2		14	25.50	30	28.58										
3	60	.123	25.0		27.5	25.50	30	28.49	*.05									
4	71	.054	11.8		8.5	27.80	30.5	28.52	*T									
5	84	.059	16.2		18	25.5	30.5	28.68	*T									
6	70	.046	9.2		5.5	27.8	30.5	28.98			0	0				24	6.66	13.2
7	74	.117	25.8		33.5	26.5	30	28.84	*.09									
8	78	.126	25.8		23.5	27.8	30.2	28.68	*.11									
9	63	.117	28.2		32	29.2	30.5	28.54										
10	88	.090	19.0		14.5	30.2	30.5	28.48										
11	72	.070	14.0		14	28	31	28.82										
12	72	.064	11.5		10.5	27.5	30.8	28.95										
13	67	.072	7.8		8	26.8	30.5	28.90			0	0				21.5	6.03	13.7
14	78	.052	9.2		7	24.8	30.5	28.95										
15	12	.062	14.2		16.5	23.8	30.5	29.04										
16	54	.098	20.8		19.5	25.8	31	28.92	*.04									
17	175	.173	36.0		43	27.8	31	28.79										
18	216	.232	47.2		47	31	31.5	28.52	.28		‡	‡						
19	96	.183	33.0		29.5	31.5	31	28.52	*.53									
20	173	.140	28.2		29	31	31	28.61								14.5	4.88	12.7
21	182	.589	28.2		26	31.2	31.2	28.65	*1.00		0	0						
22	72	.169	33.2		34	31.2	31.2	28.84			0	0						
23	153	.176	34.8		35.5	31	31	28.91			0	0						
24	114	.207	36.2		37.5	31.8	31.5	28.72	.76									
25	116	.185	38.0		34.5	32	31.5	28.65			2.07	*a*						
26	184	.192	40.2		43.5	31.8	31.8	28.54	T		*a*	*a*						
27	163	.204	41.8		38	32.2	31.5	28.55	.02		*a*	*a*				8.5	3.37	12.4
28	117	.242	50.0		53	34.2	31.5	28.72			*a*	*a*						
29	154	.338	57.8		51	37.5	32	28.78			*a*	*a*						
30	169	.235	44.5		38	36.2	32	28.75	.26		*a*	*a*						
31	171	.202	40.2			35.8	31.8	28.90			*a*	*a*						

* Snow. † In well No. 2 ‡ Rapid flow through lysimeter March 18–21, cans overflowing in a few hours, snow bank over gage house. *a* Gage can overflowing. § No record.

GRAEFENBURG HYDROPHYSICAL RECORDS — (*Continued*).

Month of April, 1906.

DAY.	Total wind movement, 24 hours.	Mean vapor pressure.	Mean air temperature.	Mean water temperature.	Mean of maximum and minimum thermometers.	MEAN SOIL TEMPERATURE.		Mean barometer. *Inches.*	Precipitation. *Inches.*	Evaporation from water. *Inches.*	PERCOLATION THROUGH LYSIMETER. *Inches.*					ACCUMULATED SNOW ON GROUND IN WOODS. *Inches.*		Depth to water in well. *Feet.*
						2 inches depth.	24 inches depth.				1 Clay, long grass.	2 Clay, short grass.	3 Clay and loam, bare.	4 Sand, long grass.	5 Sand, bare.	Snow.	Water.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1	223	.106	31.0			34.8	31.8	28.94					‡	‡	‡	0	0	
2	194	.092	28.5			32.8	32	28.96			.22	.20						
3	123	.143	38.8			34.5	32.5	28.75	.12		*a*	*a*						5.6
4	175	.251	44.2			39.5	32.5	28.48	.86		*a*	*a*						
5	159	.164	40.5			40.5	31.2	28.48	*.25		*a*	*a*						
6	193	.148	32.2			35	31	28.38	*.12		*a*	*a*						
7	168	.126	31.0			33	31.5	28.32			*a*	*a*						
8	171	.122	32.2			32.5	31.8	28.40			*a*	*a*						
9	202	.175	47.0			34.8	31.5	28.48			*a*	*a*						
10	101	.290	48.8			40.2	31.5	28.38	.30		*a*	*a*						5.10
11	174	.243	41.2			40.8	31.5	28.30	.35		*a*	*a*						
12	123	.140	39.2			39	31.8	28.46			*a*	*a*						
13	146	.188	44.0			40	33.8	28.40			*a*	*a*						
14	166	.155	30.5			37.5	35	28.40	.60		*a*	*a*						
15	130	.115	31.5			36	35.2	28.43			*a*	*a*						
16	237	.127	27.5			33.5	35	28.23	.50									
17	311	.108	28.8			33	34.5	28.34										6.0
18	212	.115	30.2			32.5	34.2	28.58			.48	*a*						
19	233	.151	42.5			32.2	34	28.68			.03	.08						
20	104	.294	48.2			36.2	34.2	28.56	.33	—.02	0	0						
21	194	.212	37.0			42.5	35.5	28.40	.16	—.03	.60	*a*						
22	151	.126	36.2	†41.0		39	36.5	28.82		.10	.56	*a*						
23	159	.152	41.8	40.8		38.5	37	29.00		.14	.10	*a*						
24	175	.217	45.8	42.8		38.5	37	28.82	.08	.16	.03	.67						5.4
25	165	.148	42.8	44		40.5	37.8	28.70		.18	0	0						
26	82	.191	51.5	47.8		42.8	38	28.44		.10	.01	.01						
27	98	.268	53.5	50.2		46	39.2	28.36		.14	0	0						
28	164	.283	57.2	54.2		48.2	40.5	28.53		.15	0	0						
29	200	.335	50.5	50.2		48.8	41.8	28.40	.21	.18	0	0						
30	221	.244	41.8	45.5		45.5	42	28.52		.03	0	0						

a Gage cans overflowed. *Melted snow. †Record begun. ‡No record.

GRAEFENBURG HYDROPHYSICAL RECORDS — (*Continued*).

Month of May, 1905.

DAY	Total wind movement, 24 hours.	Mean vapor pressure.	Mean air temperature.	Mean water temperature.	Mean of maximum and minimum thermometers.	MEAN SOIL TEMPERATURE. 2 inches depth.	MEAN SOIL TEMPERATURE. 24 inches depth.	Mean barometer. *Inches.*	Precipitation. *Inches.*	Evaporation from water. *Inches.*	PERCOLATION THROUGH LYSIMETER. *Inches.* Clay, long grass. 1	Clay, short grass. 2	Clay and loam, bare. 3	Sand, long grass. 4	Sand, bare. 5	ACCUMULATED SNOW ON GROUND IN WOODS. *Inches.* Snow.	Water.	Depth to water in well. *Feet.*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1	184	.133	70.2	40.0	....	40.2	41.8	28.67	....	.05	0	0	†	†	†	0	0	.67
2	157	.214	80.0	41.0	....	38.2	40.8	28.74	.06	.01	0	0	....	....	....	....	....	....
3	94	.380	75.0	50.0	....	46	40.2	28.58	.19	.04	0	0	....	....	....	....	....	....
4	278	.312	74.5	54.5	......	51	42	28.79	....	.09	0	0	....	....	....	....	....	....
5	280	.344	84.0	51.5	....	48.8	43	28.87	.21	.07	0	0	....	....	....	....	....	....
6	164	.482	87.2	55.5	....	53	43.8	28.76	.33	.04	0	0	....	....	....	....	....	....
7	204	.285	72.8	53.2	....	54.2	45.5	28.66	....	.08	0	0	....	....	....	....	....	....
8	254	.219	57.8	54.2	....	50	46	28.63	.23	....	0	0	....	....	....	....	....	6.1
9	138	.212	80.5	47.5	....	48	46	28.62	....	.10	0	0	....	....	....	....	....	....
10	122	.216	60.8	57.2	....	47.2	45.2	28.82	....	.12	0	0	....	....	....	....	....	....
11	100	.384	76.0	57.8	....	51	45.5	28.76	.50	.04	0	0	....	....	....	....	....	....
12	141	.443	89.2	57.8	....	54.5	46.5	28.64	....	.08	0	0	....	....	....	....	....	....
13	126	.351	76.5	60.2	....	56	47.8	28.80	....	.10	0	0	....	....	....	....	....	....
14	175	.406	91.8	56.0	....	54.8	48.8	28.62	1.01	—.01	.50	.30	....	....	....	....	....	....
15	124	.414	79.2	60.2	....	56.5	49	28.54	....	.16	.08	.03	....	....	....	....	....	6.0
16	110	.438	90.0	58.0	....	56	49.8	28.56	.50	.04	.03	.03	....	....	....	....	....	....
17	135	.277	72.5	60.0	....	56.5	50	28.49	.26	.24	.03	.02	....	....	....	....	....	....
18	180	.304	86.0	54.8	....	54.5	50.2	28.35	.17	.11	.02	.02	....	....	....	....	....	....
19	180	.198	64.8	52.2	....	51.5	50	28.35	....	.12	.02	.02	....	....	....	....	....	....
20	158	.192	70.8	48.0	....	47.8	49.2	28.58	....	.14	.02	.02	....	....	....	....	....	....
21	149	.217	63.0	50.0	....	47.8	48	28.72	....	.14	.02	.02	....	....	....	....	....	....
22	114	.225	61.2	51.5	....	49	47.5	28.70	....	.13	.01	.01	....	....	....	....	....	6.1
23	131	.196	59.2	51.8	....	49	47.8	28.72	....	.15	0	0	....	....	....	....	....	....
24	170	.255	53.8	56.0	....	50	48	28.79	....	.20	0	0	....	....	....	....	....	....
25	289	.338	55.2	60.5	....	53	48.2	28.72	....	.15	0	0	....	....	....	....	....	....
26	156	.624	88.5	58.0	....	65	49.5	28.72	.39	.07	.10	.02	....	....	....	....	....	....
27	54	.383	74.2	61.8	....	57	50	28.82	....	.14	0	0	....	....	....	....	....	....
28	115	.320	64.2	60.0	....	56.2	50.8	28.79	....	.14	0	0	....	....	....	....	....	....
29	57	.348	81.0	61.5	....	56	51	28.72	.18	.13	0	0	....	....	....	....	....	6.7
30	79	.334	75.0	61.8	....	56.5	51.5	28.68	....	.10	0	0	....	....	....	....	....	....
31	66	.282	51.5	62.2	....	55.5	52	28.77	....	.15	0	0	....	....	....	....	....	....

† No record

GRAEFENBURG HYDROPHYSICAL RECORDS — (*Continued*).

Month of June, 1905.

DAY.	Total wind movement, 24 hours.	Mean vapor pressure.	Mean air temperature.	Mean water temperature.	Mean of maximum and minimum thermometers.	MEAN SOIL TEMPERATURE.		Mean barometer. *Inches.*	Precipitation. *Inches.*	Evaporation from water. *Inches.*	PERCOLATION THROUGH LYSIMETER. *Inches.*					ACCUMULATED SNOW ON GROUND IN WOODS. *Inches.*		Depth to water in well. *Feet.*
						2 inches depth.	24 inches depth.				Clay, long grass. 1	Clay, short grass. 2	Clay and loam, bare. 3	Sand, long grass. 4	Sand, bare. 5	Snow.	Water.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1	142	.400	61.2	61.0		55.8	52.0	28.72		.14	0	0			‡			
2	143	.358	53.2	55.8		55.2	52	28.60	.22	.12	.03	.01						
3	156	.271	54.0	56.2		53.2	51.8	28.82		.14	0	0						
4	96	.408	57.8	56.8		53	51.5	28.69	.06	—.01	0	0						
5	113	.520	63.2	63.8		57	51.2	28.58	.41	.04	.01	0						7.4
6	132	.386	55.0	59.0		58.2	52.2	28.55	.05	.02	0	0						
7	198	.289	45.5	52.0		55.2	52	28.60	.83	.18	0	0						
8	114	.372	59.2	56.2		51.2	51	28.72		.09	0	0						
9	118	.359	62.5	61.5		54.5	51.2	28.84		.14	0	0						
10	94	.459	63.8	61.8		56.5	51.8	28.76	.35	.07	0	0						
11	140	.543	64.2	61.5		58.5	52.2	28.58	.10	—.03	0	0						
12	57	.530	63.5	64.5		60.2	53.5	28.55		.03	0	0						
13	78	.447	64.5	64.5		60.5	53.8	28.60	.40		0	0						
14	102	.463	69.0	67.5		61.2	54.2	28.80		.16	0	0						
15	64	.573	72.0	72.2		64	55	28.88		.10	0	0						
16	63	.637	73.2	73.2		66.2	56.2	28.86	.25	.15	0	0						
17	100	.720	72.5	70.8		67.5	57.5	28.78	.20	—.03	0	0						
18	59	.599	67.0	71.2		68.2	58.2	28.76	.28	.06	0	0						
19	102	.661	71.2	73.8		69.5	59.5	28.72	.80	.03	0	0						8.1
20	125	.663	70.0	72.8		68.8	60.5	28.73	.70	.10	*a*	0						
21	51	.587	65.0	68.0		66.8	61.5	28.52	1.59	.04	*a*	*a*						
22	53	.561	65.5	68.2		66.8	61.8	28.58	.01		*a*	*a*						
23	57	.484	63.5	68.7		66.5	61.5	28.82			.93	*a*						
24	50	.411	68.8	70.2		67.5	61.5	28.86			.16	.60						
25	142	.530	67.8	68.5		66.2	61.5	28.62	1.57	.17	*a*	*a*	†.78	†.82				
26	166	.378	55.8	61.5		62.8	61.5	28.40	.31	.19	*a*	*a*	.54	.22				5.0
27	124	.343	53.2	57.2		57.5	60.8	28.54	1.23	.17	*a*	*a*	*a*	*a*				
28	109	.378	58.8	60.5		58.8	59.2	28.72			*a*	*a*	.20	.26				
29		.416	62.0	63.5		60.8	59	28.78	‡		*a*	*a*	.08	.08				
30										.11								

a Gage can overflowed; amount exceeded 1.2. † Began record. ‡ No record.

GRAEFENBURG HYDROPHYSICAL RECORDS—(*Continued*).

Month of July, 1905.

DAY.	Total wind movement, 24 hours.	Mean vapor pressure.	Mean air temperature.	Mean water temperature.	Mean of maximum and minimum thermometers.	MEAN SOIL TEMPERATURE.		Mean barometer. *Inches.*	Precipitation. *Inches.*	Evaporation from water. *Inches.*	PERCOLATION THROUGH LYSIMETER. *Inches.*					ACCUMULATED SNOW ON GROUND IN WOODS. *Inches.*		Depth to water in well. *Feet.*
						2 inches depth.	24 inches depth.				Clay, long grass. 1	Clay, short grass. 2	Clay and loam, bare. 3	Sand, long grass. 4	Sand, bare. 5	Snow.	Water.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1	163	.594	68.8	67.8	....	66.0	59.8	28.74	.60	.45	*a*	*a*	.33	.55	†	0	0	....
2	61	.613	66.8	67.2	....	66.2	60.2	28.62	.45	—.18	*a*	.23	.59	*a*	....	....	....	....
3	72	.572	69.0	72.8	....	69.2	61.0	28.74	....	....	*a*	*a*	.06	.16	....	....	....	....
4	121	.518	72.2	69.5	....	67.5	61.8	28.72	.28	.15	1.59	*a*	.14	.36	....	....	....	4.4
5	102	.574	69.2	67.5	....	66.5	62.0	28.76	.04	—.01	.26	.84	.02	.05	....	....	....	....
6	100	.608	69.5	70.8	....	68.8	62.2	28.81	.03	0	.01	0	.01	.01	....	....	....	....
7	109	.626	72.0	72.2	....	69.5	62.8	28.75	.01	.10	0	.10	0	0	....	....	....	....
8	72	.656	75.0	76.5	....	70.8	63.2	28.71	....	.20	0	0	0	0	....	....	....	....
9	54	.625	73.8	74.2	....	71.0	64.0	28.74	....	.14	0	0	0	0	....	....	....	....
10	32	.662	73.5	74.0	....	71.0	64.0	28.80	....	.12	0	*a*	0	0	....	....	....	5.4
11	86	.652	70.8	74.8	....	71.5	65.0	28.84	1.60	.16	*a*	*a*	.17	*a*	....	....	....	....
12	127	.661	72.8	76.5	....	72.8	66.0	28.83	.26	.23	.60	*a*	.09	.46	....	....	....	....
13	120	.664	66.2	71.8	....	72.0	66.0	28.83	.46	.15	.48	*a*	.04	.30	....	....	....	....
14	107	.552	66.0	70.5	....	69.8	66.2	28.81	.32	.11	1.32	*a*	.04	.31	....	....	....	....
15	99	.461	63.5	69.5	....	68.5	66.0	28.86	....	.10	.35	*a*	.01	.05	....	....	....	....
16	83	.503	68.2	69.2	....	66.5	65.8	28.80	.02	.12	.04	0	.02	.02	....	....	....	....
17	88	.654	75.0	72.8	....	69.5	65.2	28.60	....	.09	0	0	0	0	....	....	....	5.0
18	48	.644	76.2	75.5	....	72.2	65.2	28.72	.27	.18	0	0	.01	.09	....	....	....	....
19	163	.558	72.2	75.8	....	72.5	66.2	28.62	.11	.08	0	0	0	.06	....	....	....	....
20	120	.464	66.5	70.8	....	69.0	66.5	28.60	....	.15	0	0	0	0	....	....	....	....
21	61	.376	63.8	69.8	....	66.0	65.8	28.70	....	.16	0	0	0	0	....	....	....	....
22	89	.434	65.2	69.2	....	64.8	65.2	28.72	....	.14	0	0	0	0	....	....	....	....
23	118	.514	65.5	67.2	....	65.2	64.8	28.67	.46	.21	0	0	0	.08	....	....	....	....
24	90	.442	63.5	67.2	....	65.2	64.0	28.65	.31	.06	.09	0	0	.17	....	....	....	5.5
25	123	.356	61.2	63.0	....	63.0	64.0	28.69	....	.10	0	0	0	0	....	....	....	....
26	142	.339	62.2	64.2	....	61.8	63.2	28.76	....	.15	0	0	0	0	....	....	....	....
27	90	.375	65.8	63.8	....	62.0	62.5	28.80	....	.14	0	0	0	0	....	....	....	....
28	52	.564	66.8	67.2	....	63.5	62.2	28.78	.01	.06	0	0	0	0	....	....	....	....
29	116	.396	62.5	66.0	....	64.8	63.8	28.66	.75	.09	.82	0	0	.13	....	....	....	....
30	33	.524	62.2	65.8	....	65.0	62.8	28.44	.75	.05	.58	0	0	.50	....	....	....	....
31	58	.437	60.5	63.5	....	64.2	63.0	28.48	.47	—.06	.18	0	0	.06	....	....	....	5.5

a Gage can overflowed. † No record.

GRAEFENBURG HYDROPHYSICAL RECORDS — (*Continued*).

Month of August, 1905.

DAY.	Total wind movement, 24 hours.	Mean vapor pressure.	Mean air temperature.	Mean water temperature.	Mean of maximum and minimum thermometers.	MEAN SOIL TEMPERATURE.		Mean barometer. *Inches.*	Precipitation. *Inches.*	Evaporation from water. *Inches.*	PERCOLATION THROUGH LYSIMETER. *Inches.*					ACCUMULATED SNOW ON GROUND IN WOODS. *Inches.*		Depth to water in well. *Feet.*
						2 inches depth.	24 inches depth.				Clay, long grass. 1	Clay, short grass. 2	Clay and loam, bare. 3	Sand, long grass. 4	Sand, bare. 5	Snow.	Water.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1	116	.402	59.0	64.0	....	62.8	62.8	28.62	.47	0	.18	.03	0	0	†	....	....	....
2	76	.332	61.0	64.5	....	63.0	62.0	28.69	....	.14	0	0	0	0	†	....	....	....
3	68	.345	63.5	65.0	....	62.5	62.0	28.73	....	.13	0	0	0	0	†	....	....	....
4	76	.444	68.5	67.8	....	62.5	62.0	28.72	....	.08	0	0	0	0	†	....	....	....
5	173	.539	71.2	67.8	....	65.5	62.0	28.66	.08	.08	0	.05	0	0	†	....	....	....
6	96	.585	69.5	68.0	....	66.0	62.2	28.57	1.07	.26	1.10	0	.05	.96	†	....	....	....
7	100	.501	67.2	67.8	....	66.2	63.0	28.61	....	.06	0	0	0	0	†	....	....	....
8	79	.459	66.8	68.0	....	63.5	62.2	28.72	....	.07	0	0	0	0	†	....	....	....
9	163	.584	71.0	70.0	....	63.0	66.5	28.75	....	.11	0	0	0	0	†	....	....	5.5
10	177	.696	74.8	73.8	....	69.8	63.5	28.78	....	.07	0	0	0	0	†	....	....	....
11	69	.689	71.0	71.5	....	69.8	64.5	28.78	1.20	0	.13	0	0	0	†	....	....	....
12	71	.674	72.2	73.0	....	71.5	65.0	28.68	.56	—.04	1.55	1.03	0	.15	.34	....	....	....
13	51	.443	64.2	71.8	....	71.8	65.5	28.74	....	.17	1.47	1.61	.04	.22	.25	....	....	....
14	....	.393	59.8	67.8	....	65.8	65.8	28.65	.34	.13	.39	.25	.02	.57	.02	....	....	4.9
15	....	.411	55.2	63.0	....	62.0	65.2	28.41	1.03	.13	3.39	2.31	.14	.34	.93	....	....	....
16	....	.411	58.2	63.0	....	62.2	63.8	28.53	.13	.13	.05	.20	.33	.47	0	....	....	....
17	....	.347	60.2	65.5	....	63.8	63.0	28.83	....	.12	0	0	.08	.09	0	....	....	....
18	....	.348	60.5	65.8	....	64.0	63.0	28.88	....	.15	0	0	.02	.03	.66	....	....	....
19	....	.344	59.0	65.0	....	63.5	63.2	28.74	.01	.18	.03	0	.01	0	.09	....	....	....
20	....	.477	60.8	63.8	....	63.2	62.8	28.63	....	.06	0	0	0	0	.01	....	....	....
21	....	.561	68.5	68.0	....	65.5	63.0	28.72	....	.13	0	0	0	0	.02	....	....	....
22	91	.579	69.2	69.2	....	69.2	63.2	28.67	....	.13	0	0	0	0	0	....	....	4.6
23	97	.510	65.5	69.2	....	67.2	64.0	28.76	....	.13	0	0	0	0	.01	....	....	....
24	72	.492	65.2	68.5	....	67.2	64.0	28.71	....	.13	0	0	0	0	0	....	....	....
25	42	.388	60.2	67.5	....	66.8	64.0	28.77	....	.15	0	0	0	0	0	....	....	....
26	58	.375	55.0	64.2	....	63.0	64.0	28.74	.05	.08	0	0	0	0	0	....	....	....
27	53	.361	55.0	63.2	....	61.2	63.8	28.78	....	.13	0	0	0	0	0	....	....	....
28	74	.401	58.5	62.2	....	60.5	62.8	28.76	.31	.06	0	0	0	0	0	....	....	5.3
29	140	.485	62.2	64.2	....	63.0	62.2	28.58	.33	.04	0	0	0	0	0	....	....	....
30	169	.518	63.2	63.0	....	63.0	62.5	28.35	.80	.07	0	0	0	0	0	....	....	....
31	85	.412	59.8	64.2	....	63.8	62.2	28.55	....	.11	0	0	0	0	0	....	....	....

† No record.

GRAEFENBURG HYDROPHYSICAL RECORDS — (*Continued*).

Month of September, 1905.

DAY.	Total wind movement, 24 hours.	Mean vapor pressure.	Mean air temperature.	Mean water temperature.	Mean of maximum and minimum thermometers.	Mean Soil Temperature. 2 inches depth.	Mean Soil Temperature. 24 inches depth.	Mean barometer. *Inches.*	Precipitation. *Inches.*	Evaporation from water. *Inches.*	Percolation Through Lysimeter. *Inches.* 1 Clay, long grass.	2 Clay, short grass.	3 Clay and loam, bare.	4 Sand, long grass.	5 Sand, bare.	Accumulated Snow on Ground in Woods. *Inches.* Snow.	Water.	Depth to water in well. *Feet.*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1........	65	.419	58.8	64.5	....	63.5	62.5	28.72	....	.12	.01	*a*	.03	....	.02	....	....	....
2........	151	.465	59.2	62.2	....	61	62	28.72	1.20	.12	.21	.13	.29	....	.08	....	....	....
3........	171	.504	63	65.2	....	63.8	62	28.63	.87	.01	*a*2.57	*a*	.83	.69	.07	....	....	....
4........	76	.479	62	61.5	....	65.8	62.5	28.62	.93	.11	*a*3.65	*a*	6.58	4.93	3.10	....	....	....
5........	78	.422	58.8	64.5	....	63.5	62.8	28.65	.08	.12	*a*	*a*	.11	.36	*a*	....	....	....
6........	89	.446	58.8	63.5	....	62.2	62.5	28.65	.40	—01	*a*	*a*	.12	.10	*a*	....	....	....
7........	84	.435	58.2	62	....	61.8	62.2	28.74	.26	.06	*a*	*a*	.24	.24	*a*	....	....	....
8........	38	.401	60.2	64.2	....	62.5	61.8	28.80	....	.11	*a*	*a*	.09	.10	*a*	....	....	....
9........	63	.413	60	65	....	62.5	62	28.92	....	.11	*a*	*a*	.05	.02	.05	....	....	....
10........	101	.421	62	65.2	....	63.2	62	28.85	....	.10	.04	.07	.04	....	.09	....	....	....
11........	194	.422	57.2	60.8	....	61	62	28.65	.64	.03	.03	....	.05	.01	....	....	....	....
12........	75	.446	58	60	....	59.2	61.5	28.57	.03	00	.07	.08	.07	.14	.01	....	....	....
13........	83	.299	48.5	52	....	59	61	28.70	.01	.07	.04	.06	.06	.06	.05	....	....	....
14........	104	.214	43.8	54.2	....	54.5	60.2	28.92	....	.11	.03	.04	.02	.01	.07	....	....	....
15........	159	.309	53	54.8	....	53	58.8	28.84	.19	.07	.02	.02	.04	T	.03	....	....	....
16........	123	.443	59.5	59.5	....	57.5	58.2	28.84	....	.10	.03	.02	.02	T	.02	....	....	....
17........	144	.522	63.2	62.5	....	61	58.8	28.78	.69	—91	.04	.01	.06	T	.01	....	....	....
18........	99	.405	67	65.5	....	64.5	59.5	28.74	....	.04	.15	.19	.30	.21	.03	....	....	....
19........	133	.641	70.9	68.2	....	65.5	60.5	28.72	....	.10	.05	.07	.06	.07	.13	....	....	....
20........	109	.461	60.8	64.5	....	65.8	61.2	28.63	.34	.02	.10	.07	.11	.08	.05	....	....	....
21........	153	.373	59	62.5	....	62	61.5	28.64	....	.14	.05	.05	.06	.05	.06	....	....	....
22........	138	.364	60.5	62.8	....	61.8	61	28.50	.07	.10	.03	.03	.02	....	.03	....	....	....
23........	162	.288	50.5	58.5	....	58.5	60.8	28.61	....	.11	.02	.02	.01	.01	....	....	....	....
24........	145	.264	50	57.5	....	56.8	59.8	28.56	....	.11	.01	....	....	....	....	....	....	....
25........	184	.189	41	52	....	54	58.8	28.60	....	.17	....	....	.01	....	....	....	....	....
26........	126	.175	40	50.2	....	50	58	28.74	....	.12	.01	....	....	....	....	....	....	....
27........	79	.288	51.5	52.2	....	49.8	56	28.61	....	.06	....	....	....	....	....	....	....	....
28........	118	.369	56.2	56.5	....	54.8	56	28.66	....	.07	....	....	....	....	....	....	....	....
29........	58	.427	60.2	60.8	....	57.8	56.2	28.75	....	.02	.02	....	.01	....	.01	....	....	....
30........	53	.455	62.8	62.5	....	60.2	57.2	28.78	....	.05	....	....	....	....	....	....	....	....

a Excessive percolation; gage cans overflowed.

GRAEFENBURG HYDROPHYSICAL RECORDS — (*Continued*).

Month of October, 1905.

DAY.	Total wind movement, 24 hours.	Mean vapor pressure.	Mean air temperature.	Mean water temperature.	Mean of maximum and minimum thermometers.	MEAN SOIL TEMPERATURE.		Mean barometer. *Inches.*	Precipitation. *Inches.*	Evaporation from water. *Inches.*	PERCOLATION THROUGH LYSIMETER. *Inches.*					ACCUMULATED SNOW ON GROUND IN WOODS. *Inches.*		Depth to water in well. *Feet.*
						2 inches depth.	24 inches depth.				1 Clay, long grass.	2 Clay, short grass.	3 Clay and loam, bare.	4 Sand, long grass.	5 Sand, bare.	Snow.	Water.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1	70	.428	62.0	62.5	....	61.2	58	28.76	....	.06	.01	....	.01	....	.01	....	7.8	....
2	152	.427	64.8	62.5	....	62	58.8	28.68	1.09	.11	.05	.01	.12	....	....	....	....	....
3	129	.328	54.8	61	....	61	59.2	28.66	....	.07	.03	.01	.09	....	....	....	....	....
4	163	.358	61.8	60.8	....	59	59	28.51	....	.12	....	....	.03	....	....	....	....	....
5	202	.280	51.8	57.8	....	58	58.8	28.52	....	.20	....	....	.02	....	....	....	....	....
6	112	.196	42	52.8	....	53.2	58	28.83	....	.15	....	....	....	....	....	....	....	....
7	111	.220	44.5	53.2	....	51.8	56.8	28.89	....	.10	....	....	....	....	....	....	....	....
8	80	.328	52.5	54.8	....	53	?	28.74	....	.08	....	....	....	....	....	....	....	....
9	152	.316	59	56.8	....	55.8	56	28.77	....	.12	....	....	....	....	....	....	8.1	....
10	172	.270	51.8	55	....	53.8	56	28.68	....	.08	....	....	....	....	....	....	....	....
11	222	.275	44.8	49.8	....	52	56	28.38	1.88	.18	.41	.43	.64	.03	....	....	....	....
12	148	.221	39.2	45.8	....	48.2	54.8	28.26	.36	.04	.17	.47	.26	.27	.08	....	....	....
13	90	.226	40.2	46.	....	47	53.5	28.51	.07	.02	.22	.81	.22	.25	.25	....	....	....
14	63	.256	45.8	49.8	....	49	53	28.82	....	.05	.06	.11	.02	.09	.17	....	....	....
15	169	.312	60	54.2	....	51.8	52.8	28.78	.01	.04	.03	.04	.01	.04	.12	....	....	....
16	143	.290	47	51.8	....	53.8	53.2	28.75	....	.07	.02	.04	.12	.02	.07	....	6.2	....
17	99	.283	48.2	50.8	....	50.2	53.5	28.88	....	.09	....	.01	.01	....	.03	....	....	....
18	239	.427	59.8	55.2	....	52.2	53	28.67	.41	—.03	.02	.02	....	.01	.03	....	....	....
19	130	.445	58.8	56.5	....	56.2	53.8	28.62	.12	.02	.01	.03	.02	....	.01	....	....	....
20	243	.265	48.8	51.2	....	54.2	54.2	28.31	.06	.06	.01	.01	.05	.02	.04	....	....	....
21	208	.158	36.5	42.2	....	45.2	53.8	28.52	.04	.01	.02	.05	.05	.02	.03	....	....	....
22	134	.181	35.2	42.2	....	44	51.8	28.53	.08	.01	....	.01	.04	.03	.05	....	....	....
23	141	.180	40.2	43.8	....	44.8	50.8	28.60	....	.08	.01	.03	.04	.02	.04	....	6.6	....
24	134	.193	41.2	43.8	....	45	50	28.63	.01	.02	.01	.05	.02	.01	.05	....	....	....
25	93	.128	28.8	41	....	44	49.2	28.72	....	.06	.01	....	.02	.01	.02	....	....	....
26	170	.108	33.8	40	....	39.2	48.2	28.76	....	.07	....	....	....	....	....	....	....	....
27	156	.184	40.8	40.2	....	38.8	47.8	28.72	.02	.04	.01	.03	.02	.01	.01	....	....	....
28	110	.178	36.5	40.8	....	42.5	47	28.89	+.04	.03	....	.02	....	....	.01	....	....	....
29	45	.099	25.5	39	....	40.2	46.8	29.47	....	.02	....	....	....	....	....	....	....	....
30	106	.146	36.5	39.5	....	38.2	46	29.02	....	.04	.02	.01	....	....	.01	....	7.0	....
31	97	.238	43.8	41.5	....	39.8	45.8	28.72	.54	—.03	.01	.03	.02	.01	.01	....	....	....

GRAEFENBURG HYDROPHYSICAL RECORDS — (*Continued*).

Month of November, 1905.

DAY.	Total wind movement, 24 hours.	Mean vapor pressure.	Mean air temperature.	Mean water temperature.	Mean of maximum and minimum thermometers.	MEAN SOIL TEMPERATURE.		Mean barometer. *Inches.*	Precipitation. *Inches.*	Evaporation from water. *Inches.*	PERCOLATION THROUGH LYSIMETER. *Inches.*					ACCUMULATED SNOW ON GROUND IN WOODS. *Inches.*		Depth to water in well. *Feet.*
						2 inches depth.	24 inches depth.				1 Clay, long grass.	2 Clay, short grass.	3 Clay and loam, bare.	4 Sand, long grass.	5 Sand, bare.	Snow.	Water.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1	284	.175	33.0	38.0	....	41	45	28.33	*.03	—.03	.02	.03	.10	.04	0	0	0	....
2	158	.134	29.8	34.2	....	38	45	28.65	....	†	.04	.07	.06	.06	.03	....	....	....
3	184	.176	35.0	36.0	....	35.8	44.2	28.56	.02	—.02	.04	.05	.05	.05	.06	....	....	....
4	152	.201	37.5	38.5	....	38.8	44	28.64	....	.02	.02	.03	.04	.02	.02	....	....	....
5	153	.191	37.0	39.5	....	40	43.5	28.81	.23	.00	.02	.03	.02	.03	.05	....	....	....
6	288	.181	35.8	38.2	....	39.2	43.5	28.27	.31	.00	.29	.24	.29	.23	.03	....	....	7.0
7	87	.157	37.5	38.8	....	39.5	43.5	28.31	.04	.01	.09	.11	.10	.12	.12	....	....	....
8	172	.161	34.8	37.5	....	39.2	43.5	28.26	.25	.01	.13	.14	.16	.12	.11	....	....	....
9	192	.146	31.2	35.0	....	36	43	28.49	*.05	.00	.06	.11	.07	.11	.10	....	....	....
10	150	.134	30.8	34.5	....	35.8	42	28.75	....	.00	.06	.04	.06	.06	.10	....	....	....
11	254	.165	40.8	37.8	....	36.5	41.5	28.65	....	.04	.05	.05	.06	.05	.08	....	....	....
12	211	.208	50.8	41.2	....	38.8	41.5	28.35	.01	.00	.04	.04	.05	.04	.12	....	....	....
13	180	.089	23.2	36.0	....	39.8	42	28.15	.15	?	.02	.04	.02	.03	0	....	....	6.6
14	119	.072	20.0	31.5	....	35.2	42	28.44	....	00	.03	.04	.04	.01	.05	....	....	....
15	294	.126	31.8	33.8	....	34	41	28.17	....	00	.02	.03	.03	.01	.04	....	....	....
16	207	.162	34.5	34.0	....	34.2	40.5	28.50	*.10	?	.03	.03	.02	.01	.01	....	....	....
17	134	.143	29.8	32.8	....	34	40	28.36	.09	?	.03	.03	.02	.02	.03	....	....	....
18	147	.147	30.2	32.8	....	34.2	39.5	28.50	....	00	.04	.01	.05	.02	.02	....	....	....
19	103	.105	23.0	32.2	....	34.2	39.5	28.65	....	00	.02	.02	.04	.01	.02	....	....	....
20	55	.077	21.2	31.5	....	33	39	29.05	....	00	.03	.03	.02	.02	.03	....	....	7.0
21	92	.074	26.8	31.5	....	32.8	38.5	29.12	....	00	.03	.02	.01	.02	.02	....	....	....
22	132	.110	33.8	32.8	....	32.5	38.5	29.13	....	00	.02	.01	.02	0	0	....	....	....
23	165	.152	42.5	34.8	....	32.5	38	28.79	....	00	.02	.01	0	.01	0	....	....	....
24	314	.178	49.2	36.8	....	34.5	38	*28.51	.03	?	.01	.03	.01	0	.01	....	....	....
25	165	.166	34.2	34.2	....	38.2	38.2	28.45	....	00	.01	0	0	0	0	....	....	....
26	182	.169	34.0	34.0	....	34.5	38.5	28.38	.06	?	.01	.01	.01	0	0	....	....	....
27	170	.127	27.8	33.2	....	34.5	38.5	28.73	....	00	0	0	0	0	0	....	....	7.3
28	314	.208	37.2	34.2	....	33.8	38.2	28.66	.52	?	.05	.03	.03	.02	0	....	....	....
29	310	.199	36.8	37.5	....	38	38	28.18	.26	?	1.06	.35	.58	.35	.05	....	....	....
30	189	.043	8.5	....	....	34.2	38.2	28.78	.00	....	.10	.41	.09	.15	.13	0	0	....

* Snow.

GRAEFENBURG HYDROPHYSICAL RECORDS — (*Continued*).

Month of December, 1905.

DAY.	Total wind movement, 24 hours.	Mean vapor pressure.	Mean air temperature.	Mean water temperature.	Mean of maximum and minimum thermometers.	MEAN SOIL TEMPERATURE. 2 inches depth.	MEAN SOIL TEMPERATURE. 24 inches depth.	Mean barometer. *Inches.*	Precipitation. *Inches.*	Evaporation from water. *Inches.*	PERCOLATION THROUGH LYSIMETER. *Inches.* 1 Clay, long grass.	2 Clay, short grass.	3 Clay and loam, bare.	4 Sand, long grass.	5 Sand, bare.	ACCUMULATED SNOW ON GROUND IN WOODS. *Inches.* Snow.	Water.	Depth to water in well. *Feet.*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1	131	.073	18.2	....	....	32.5	38	29.20	.01	....	.05	.07	.03	.07	.10	0	0	....
2	246	.183	35.5	....	....	32	37.5	29.05	1.27	....	3.36	2.10	.66	2.73	2.93	....	....	....
3	125	.159	30.8	....	....	32	37	28.45	.61	....	*a*	*a*	*a*	*a*	*a*	....	....	....
4	203	.063	17.8	....	....	32.2	37	28.58	.12	....	*a*	*a*	*a*	*a*	*a*	....	....	....
5	174	.078	20.8	....	....	32.5	36.8	29.08	....	....	.88	*a*	.06	.05	.19	....	....	5.8
6	246	.137	31.8	....	....	32.5	36.5	28.86	....	....	.07	*a*	.04	.03	.11	....	....	....
7	216	.147	35.0	....	....	32.5	36	28.78	....	....	.03	.19	.04	.04	1.11	....	....	....
8	109	.161	34.5	....	....	32.8	36	28.83	....	....	.01	.03	.09	.02	.10	....	....	....
9	273	.166	32.5	....	....	32.5	36	28.69	T	....	.04	.07	.10	.04	.07	....	....	....
10	198	.108	20.8	....	....	32.5	36	28.28	....	....	.05	.05	.07	.04	.04	....	....	....
11	232	.133	31.8	....	....	32.5	36	28.10	.01	....	.04	.03	.04	.02	.05	....	....	....
12	136	.137	32.5	....	....	32.5	36	28.28	....	....	.03	.03	.04	.01	.03	....	....	6.6
13	165	.117	26.8	....	....	32.5	35.8	28.54	....	....	.02	.02	.02	.01	.02	....	....	....
14	101	.052	10.2	....	....	32.5	35.8	28.86	....	....	0	0	.01	0	0	....	....	....
15	105	.032	3.0	....	....	32	35.5	28.91	....	....	.02	.01	.02	0	0	....	....	....
16	54	.044	11.8	....	....	31.2	35.5	28.78	....	....	.03	.03	.02	0	0	....	....	....
17	84	.042	14.2	....	....	30.2	35	28.59	....	....	.01	.01	.01	0	0	....	....	....
18	95	.141	31.2	....	....	30.2	35	28.45	....	....	.02	.03	.02	0	.01	....	....	....
19	69	.184	35.0	....	....	31.2	35	28.62	....	....	.02	0	0	0	0	....	....	7.0
20	253	.193	37.2	....	....	31.5	35	28.86	.54	....	.01	0	.01	0	0	....	....	....
21	274	.194	38.2	....	....	32	34.5	28.23	.31	....	3.44	3.18	1.68	2.40	3.35	....	....	....
22	183	.176	36.8	....	....	32	34.8	28.43	.14	....	*a*	*a*	*a*	*a*	*a*	....	....	....
23	183	.145	31.5	....	....	32	34.5	28.34	.07	....	*a*	*a*	.53	.25	*a*	....	....	....
24	228	.088	23.5	....	....	32	34.5	28.40	T	....	.76	*a*	.08	.02	.14	....	....	....
25	152	.093	25.2	....	....	31.8	34.5	28.47	T	....	.07	*a*	.06	.01	.10	....	....	6.0
26	258	.108	33.5	....	....	31.5	34.5	28.52	....	....	.04	.03	.03	0	.06	....	....	....
27	191	.123	36.2	....	....	31.8	34.5	28.60	....	....	.03	0	.02	0	.03	....	....	....
28	263	.160	36.0	....	....	31.5	34.5	28.65	.15	....	.01	.01	.13	0	.02	....	....	....
29	241	.174	37.2	....	....	31.8	34.5	28.16	....	....	2.68	3.65	.98	.49	3.37	....	....	....
30	378	.126	30.2	....	....	32	34.5	28.09	....	....	.69	*a*	.19	.9	.54	....	....	....
31	165	.184	29.2	....	....	32	34	28.51	....	....	.06	.62	.04	.86	.15	....	....	....

a Excessive percolation; gage cans overflowed.

GRAEFENBURG HYDROPHYSICAL RECORDS—(*Continued*).

Month of January, 1906.

DAY.	Total wind movement, 24 hours.	Mean vapor pressure.	Mean air temperature.	Mean water temperature.	Mean of maximum and minimum thermometers.	MEAN SOIL TEMPERATURE.		Mean barometer. *Inches.*	Precipitation.* *Inches*	Evaporation from water. *Inches.*	PERCOLATION THROUGH LYSIMETER. *Inches.*					ACCUMULATED SNOW ON GROUND IN WOODS. *Inches.*		Depth to water in well. *Feet.*
						2 inches depth.	24 inches depth.				1 Clay, long grass.	2 Clay, short grass.	3 Clay and loam, bare.	4 Sand, long grass.	5 Sand, bare.	Snow.	Water.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1	319	.104	24.2	....	....	31.8	34	28.66	.01	....	.05	.05	.05	.03	.08	0	0	5.9
2	60	.077	19.5	....	....	31.5	34	28.83	....	....	.02	.02	0	0	.05	....	....	....
3	389	.135	25.8	....	....	31	34	28.49	.51	....	.03	.02	.02	.02	.03	....	....	....
4	209	.176	44.2	....	....	31.2	34	28.87	.14	....	.98	.02	.02	0	0	....	....	....
5	270	.135	30.5	....	....	31.5	34	28.15	T	....	.01	.01	.01	0	0	....	....	....
6	346	.110	25.2	....	....	31.2	34	28.22	.06	....	.05	0	0	0	0	....	....	....
7	252	.069	15.8	....	....	31	34	28.54	.01	....	.03	.01	0	0	0	....	....	....
8	112	.045	6.2	....	....	30.8	33.8	28.63	....	....	.01	0	0	0	0	....	....	6.7
9	165	.042	4.5	....	....	29.8	33.5	28.55	....	....	.01	.01	0	0	0	....	....	....
10	177	.051	16	....	....	28.8	33.5	28.78	....	....	0	0	0	0	0	....	....	....
11	160	.113	29.2	....	....	29	33.5	28.90	.09	....	0	0	0	0	0	....	....	....
12	149	.135	29.5	....	....	30.8	33.5	28.87	....	....	.05	0	0	0	0	....	....	....
13	239	.074	29.2	....	....	29.2	33.5	28.83	....	....	0	0	0	0	0	....	....	....
14	189	.120	34	....	....	29	33.2	28.65	.03	....	.01	.01	0	0	0	....	....	....
15	258	.187	37	....	....	30.5	33	28.60	....	....	.03	0	0	0	0	....	....	7.0
16	272	.174	33.8	....	....	31.5	33	28.06	.05	....	.01	0	0	0	0	....	....	....
17	289	.140	28.5	....	....	31.5	33	28.40	.07	....	0	0	0	0	0	....	....	....
18	200	.132	28.8	....	....	31.5	33	28.16	....	....	0	0	0	0	0	....	....	....
19	196	.092	19	....	....	30.5	33	28.67	.08	....	0	0	0	0	0	....	....	....
20	249	.179	37.8	....	....	30.5	33	28.61	....	....	.26	0	.09	1.12	.65	....	....	....
21	177	.300	51.8	....	....	31.5	33	28.70	....	....	10.29	6.21	3.17	*a*	*a*	....	....	....
22	298	.428	59.8	....	....	34	33	28.69	....	....	*a*	*a*	*a*	*a*	*a*	....	....	5.6
23	298	.268	41	....	....	38.5	33	28.60	.55	....	*a*	*a*	*a*	*a*	*a*	....	....	....
24	155	.081	21.5	....	....	32	33	28.96	....	....	*a*	*a*	*a*	*a*	*a*	....	....	....
25	73	.059	15.8	....	....	31.0	33	29.16	....	....	*a*	*a*	.10	.14	.46	....	....	....
26	51	.072	22.5	....	....	31.2	33	28.99	....	....	.05	.06	.14	.19	.07	....	....	....
27	50	.100	30.5	....	....	31	33	28.67	....	....	.01	0	0	.01	.03	....	....	....
28	235	.102	24.8	....	....	31	33	28.33	....	....	.02	.03	0	0	0	....	....	....
29	177	.060	19.2	....	....	28.5	33	28.60	....	....	.02	0	0	0	0	....	....	6.5
30	220	.142	39.5	....	....	30	33	28.54	.01	....	.02	.03	.01	0	0	....	....	....
31	113	.151	32	....	....	31.2	33	28.49	.06	....	.02	.02	.01	0	0	....	....	....

* Rain and snow. *a* Excessive percolation, gage cans overflowed.

GRAEFENBURG HYDROPHYSICAL RECORDS — (*Continued*).

Month of February, 1906.

DAY.	Total wind movement, 24 hours.	Mean vapor pressure.	Mean air temperature.	Mean water temperature.	Mean of maximum and minimum thermometers.	Mean Soil Temperature. 2 inches depth.	Mean Soil Temperature. 24 inches depth.	Mean barometer. *Inches.*	Precipitation.* *Inches.*	Evaporation from water. *Inches.*	Percolation Through Lysimeter. *Inches.* 1 Clay, long grass.	2 Clay, short grass.	3 Clay and loam, bare.	4 Sand, long grass.	5 Sand, bare.	Accumulated Snow on Ground in Woods. *Inches.* Snow.	Water.	Depth to water in well. *Feet.*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1	293	.091	21.8			31.5	33	28.30	.01		0	0	0	0	0	0	0	
2	213	.024	—3.5			28.8	33	28.50	T		0	0	0	0	0			
3	227	.040	8			26.2	32.5	28.75	T		0	0	0	0	0			
4	229	.076	26.5			27.8	32.5	28.61	.11		0	0	0	0	0			
5	184	.062	—3.8			28	32.5	28.77	.02		0	0	0	0	0			7.2
6	107	.041	—10.5			22.8	32.2	28.94			0	0	0	0	0			
7	152	.068	—4.2			22.2	32	28.84			0	0	0	0	0			
8	244	.058	12			22.8	32	28.77	.03		0	0	0	0	0			
9	127	.096	22.5			25.8	32	28.56	.11		0	0	0	0	0			
10	120	.051	10.8			27.2	32	29.03			0	0	0	0	0			
11	69	.039	7.8			27	31.8	29.19			0	0	0	0	0			
12	49	.084	21.8			27.8	31.5	29.21			0	0	0	0	0			8.4
13	24	.152	32.8			28.5	31.5	28.69	.03		0	0	0	0	0			
14	132	.099	16.8			28.2	31.5	28.41	.15		0	0	0	0	0			
15	141	.044	6			28	31.5	28.66			0	0	0	0	0			
16	69	.066	15.8			27.5	31.5	29.07			0	0	0	0	0			
17	51	.073	21.5			27	31.5	29.10			0	0	0	0	0			
18	51	.128	28.5			27.5	31.5	28.61	.03		0	0	0	0	0			
19	38	.151	31.5			29	31.5	28.66			0	0	0	0	0			
20	39	.153	41.2			30	31.5	28.67			.02	0	.01	0	.02			
21	63	.183	37.8			31.2	31.5	28.38	.18		0	.19	.42	.61	3.10			9.0
22	50	.130	27.5			31.5	31.5	28.64			.08	.02	.01	.01	.17			
23	17	.126	32.5			31.5	31.5	26.74			0	0	0	0	0			
24	55	172	41			31.5	31.5	28.65			0	0	0	0	0			
25	75	.188	38.8			31.8	31.5	28.36	.09		.88	0	.01	.01	0			
26	98	.086	19			32	31.5	28.37	.01		.01	0	.05	0	0			7.0
27	66	.033	7.2			31	31.5	28.42			0	0	0	0	0			
28	67	.030	4.8			23	31.5	28.37			0	0	0	0	0			

* Rain and snow.

GRAEFENBURG HYDROPHYSICAL RECORDS—(*Continued*).

Month of March, 1906.

DAY.	Total wind movement, 24 hours.	Mean vapor pressure.	Mean air temperature.	Mean water temperature.	Mean of maximum and minimum thermometers.	MEAN SOIL TEMPERATURE.		Mean barometer. *Inches.*	Precipitation.* *Inches.*	Evaporation from Water. *Inches.*	PERCOLATION THROUGH LYSIMETER. *Inches.*					ACCUMULATED SNOW ON GROUND IN WOODS. *Inches.*		Depth to water in well. *Feet.*
						2 inches depth.	24 inches depth.				1 Clay, long grass.	2 Clay, short grass.	3 Clay and loam, bare.	4 Sand, long grass.	5 Sand, bare.	Snow.	Water.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1	89	.037	12.5	....	....	21.8	31	28.54	....	....	0	0	0	0	0	....	....	....
2	107	.055	20.2	....	....	23.2	31	28.70	....	....	0	0	0	0	0	....	....	....
3	160	.126	30	....	....	25.5	31	28.44	.38	....	0	0	0	0	0	....	....	....
4	226	.137	31.2	....	....	30.2	31	28.28	.01	....	0	0	0	0	0	....	....	....
5	130	.093	22.5	....	....	30.2	30.5	28.69	....	....	0	0	0	0	0	....	....	7.3
6	168	.113	27.5	....	....	28	30.5	29.00	....	....	0	0	0	0	0	....	....	....
7	112	.130	29.8	....	....	29.8	31	28.66	T	....	0	0	0	0	0	....	....	....
8	80	.158	34	....	....	30	31	28.34	....	....	0	0	0	0	0	....	....	....
9	232	.159	31.8	....	....	31	31	28.09	.04	....	0	0	0	0	0	....	....	....
10	342	.098	27	....	....	31	31	28.16	T	....	0	0	0	0	0	....	....	....
11	149	.110	26.5	....	....	29.5	31	28.53	.21	....	0	0	0	0	0	....	....	....
12	212	.066	17.8	....	....	30	31	28.64	....	....	0	0	0	0	0	....	....	7.6
13	71	.041	12.5	....	....	27.8	31	28.72	....	....	0	0	0	0	0	....	....	....
14	275	.049	16.	....	....	27	31	28.65	....	....	0	0	0	0	0	....	....	....
15	209	.062	15	....	....	25.0	31	28.45	.16	....	0	0	0	0	0	....	....	....
16	206	.066	17.5	....	....	26.5	31	28.35	T	....	0	0	0	0	0	....	....	....
17	280	.069	14.8	....	....	26.8	30.5	28.55	.01	....	0	0	0	0	0	....	....	....
18	180	.055	15	....	....	26.2	30.5	28.94	....	....	0	0	0	0	0	....	....	....
19	301	.089	20.2	....	....	26	30.5	28.58	.39	....	0	0	0	0	0	....	....	7.8
20	314	.100	21.5	....	....	27.5	30.5	28.02	.03	....	0	0	0	0	0	....	....	....
21	324	.081	20.8	....	....	28	30.5	28.27	.01	....	0	0	0	0	0	....	....	....
22	189	.059	12	....	....	28.2	30.5	28.43	.03	....	0	0	0	0	0	....	....	....
23	107	.039	5.5	....	....	27.2	30.5	†	T	....	0	0	0	0	0	....	....	....
24	....	.035	11.5	....	....	27.5	30.5	†	....	....	0	0	0	0	0	....	....	....
25	138	.053	21.8	....	....	27.8	30.5	†	....	....	.01	0	.01	.02	0	....	....	....
26	299	.169	37	....	....	28.5	30.2	†	.25	....	0	0	0	0	0	....	....	9.6
27	286	.214	40	....	....	31.2	30.5	†	....	....	0	0	0	0	0	....	....	....
28	132	.132	29	....	....	31.5	30.5	†	....	....	0	0	0	0	0	....	....	....
29	68	.159	33	....	....	31.5	30.8	†	.05	....	0	0	0	0	0	....	....	....
30	105	.162	32.5	....	....	31.8	31	†	.75	....	0	0	0	0	0	....	....	....
31	240	.093	26.8	....	....	31.5	31	†	....	....	0	0	0	0	0	....	....	....

* Rain and snow. †No record.

GRAEFENBURG HYDROPHYSICAL RECORDS —(*Continued*).

Month of April, 1906.

DAY.	Total wind movement, 24 hours.	Mean vapor pressure.	Mean air temperature.	Mean water temperature.	Mean of maximum and minimum thermometers.	MEAN SOIL TEMPERATURE.		Mean barometer. *Inches.*	Precipitation. *Inches.*	Evaporation from water. *Inches.*	PERCOLATION THROUGH LYSIMETER. *Inches.*					ACCUMULATED SNOW ON GROUND IN WOODS. *Inches.*		Depth to water in well. *Feet.*
						2 inches depth.	24 inches depth.				(1) Clay, long grass.	(2) Clay, short grass.	(3) Clay and loam, bare.	(4) Sand, long grass.	(5) Sand, bare.	Snow.	Water.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1	201	.080	29	......	......	31.8	31	......	......	......	0	0	0	0	.72	......	......	......
2	155	.074	27.8	......	......	31.5	31	......	......	......	0	0	.01	0	0	......	......	6.4
3	152	.105	39	......	......	31.5	31	......	......	......	0	0	0	0	0	......	......	......
4	195	.192	41.8	......	......	32	31	......	.42	......	0	0	0	.01	.18	......	......	......
5	101	.176	33.5	......	......	32	31	......	.23	......	0	0	.02	.01	0	......	......	......
6	197	137	30.8	......	......	32	31	......	.01	......	.47	0	0	0	0	......	......	......
7	70	.133	30.5	......	......	32.5	31	......	.01	......	0	0	0	0	0	......	......	......
8	165	.142	35.5	......	......	33.5	38	......	......	......	.01	0	0	0	0	......	......	......
9	462	.149	31.2	......	......	32	31	......	.76	......	0	0	0	0	0	......	......	5.9
10	225	.187	35	......	......	32	31	......	.15	......	.12	0	.25	0	.14	......	......	......
11	184	.197	35.5	......	......	32	31	......	.05	......	3.07	3.34	.36	.78	2.58	......	......	......
12	166	.183	37	......	......	33.2	31	......	T	......	*a*	*a*	*a*	*a*	*a*	......	......	......
13	132	.192	43.5	......	......	36.5	31.2	......	......	......	*a*	*a*	*a*	*a*	*a*	......	......	......
14	264	.276	50.2	......	......	39.2	31.5	......	.41	......	*a*	*a*	*a*	*a*	*a*	......	......	......
15	167	.215	42.8	......	......	41.8	31.5	......	.02	......	*a*	*a*	*a*	*a*	*a*	......	......	......
16	163	.138	35	......	......	38.8	31.5	......	......	......	*a*	*a*	*a*	*a*	*a*	......	......	......
17	170	.177	43.5	......	......	39	31.5	......	......	......	*a*	*a*	*a*	*a*	*a*	......	......	5.5
18	125	.240	49.5	......	......	41	31.5	......	......	......	*a*	*a*	.42	.75	*a*	......	......	......
19	112	.256	57.5	......	......	46	31.5	......	......	......	*a*	*a*	.04	.30	*a*	......	......	......
20	153	.236	51.2	......	......	46	31.5	......	......	......	.16	0	.02	.16	.78	......	......	......
21	195	.217	45.2	......	......	43.5	31.5	......	.34	......	.02	1.03	.01	.08	.12	......	......	......
22	118	.168	40	......	......	44.5	37.2	......	......	......	.11	1.03	.01	.15	.12	......	......	......
23	273	.124	34.2	......	......	40.8	38.5	......	......	......	.01	.75	.01	.01	.02	......	......	......
24	311	.115	38.5	......	......	38	38.2	......	......	......	.01	.02	0	.02	.05	......	......	5.9
25	184	.136	39.5	......	......	38.2	37.8	......	......	......	.01	.01	.01	0	.01	......	......	......
26	167	.163	46.8	......	......	40.5	37.5	......	......	......	0	0	0	0	.01	......	......	......
27	196	.175	45.5	......	......	43.2	38.2	......	......	......	.01	0	0	0	.01	......	......	......
28	160	.184	45.0	......	......	43	39	......	......	......	0	0	0	0	0	......	......	......
29	162	.277	55 2	......	......	45.2	40	......	.24	......	0	0	0	0	0	......	......	......
30	......	.370	53	......	......	48.5	41.2	......	......	......	......	......	......	......	......	......	......	6.5

a Excessive percolation; gage cans overflowed daily.

GRAEFENBURG HYDROPHYSICAL RECORDS — (*Continued*)

Month of June, 1906.

DAY.	Total wind movement, 24 hours.	Mean vapor pressure.	Mean air temperature.	Mean water temperature.	Mean of maximum and minimum thermometers.	Mean Soil Temperature. 2 inches depth.	Mean Soil Temperature. 24 inches depth.	Mean barometer. *Inches.*	Precipitation. *Inches.*	Evaporation from water. *Inches.*	Percolation Through Lysimeter. *Inches.* Clay, long grass.¹	Clay, short grass.²	Clay and loam, bare.³	Sand, long grass.⁴	Sand, bare.⁵	Accumulated Snow on Ground in Woods. *Inches.* Snow.	Water.	Depth to water in well. *Feet.*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1..........	108	.354	64.5	....	....	59.5	52.2	....	....	....	0	0	0	0	0	....	....	....
2..........	117	.313	61.2	....	....	59.8	53.5	....	....	....	0	0	0	0	0	....	....	....
3..........	133	.343	62	....	....	59.2	54	....	....	....	0	0	0	0	0	....	....	....
4..........	120	.392	67.5	....	....	59.8	54.2	....	....	....	0	0	0	0	0	....	....	6.8
5..........	112	.562	67	....	....	62.2	55	....	.12	....	0	0	0	0	0	....	....	....
6..........	95	.576	67.2	....	....	64	55.8	....	.11	....	0	0	0	0	0	....	....	....
7..........	149	.531	65.8	....	....	65	56.5	....	....	....	0	0	0	0	0	....	....	....
8..........	150	.546	67	....	....	62.2	57.2	....	.60	....	.07	.01	.02	0	.01	....	....	....
9..........	128	.545	69.5	....	....	66.5	57.8	....	....	....	.01	.01	.01	0	0	....	....	....
10..........	101	.410	61.2	....	....	64.5	58.5	....	.43	....	.05	0	0	0	0	....	....	....
11..........	106	.227	49.5	....	....	61.8	58.2	....	....	....	0	0	0	0	0	....	....	....
12..........	108	.232	52.8	....	....	52.5	57.2	....	....	....	0	0	0	0	0	....	....	8.1
13..........	42	.318	62.2	....	....	58	56.2	....	....	....	0	0	0	0	0	....	....	....
14..........	49	.427	70.5	....	....	60.2	56	....	....	....	0	0	0	0	0	....	....	....
15..........	40	.515	69.2	....	....	62.8	56.5	....	.67	....	.01	0	0	0	0	....	....	....
16..........	165	.520	61.5	....	....	65	52.7	....	.09	....	0	0	0	0	0	....	....	....
17..........	169	.491	60.8	....	....	63.5	58.2	....	.30	....	0	0	0	0	0	....	....	....
18..........	180	.513	62.5	....	....	63.8	58.2	....	.20	....	0	0	0	0	0	....	....	8.7
19..........	74	.529	66.2	....	....	64.5	58.5	....	....	....	0	0	0	0	0	....	....	....
20..........	112	.524	69	....	....	66.2	59	....	.10	....	0	0	0	0	0	....	....	....
21..........	70	.519	66.8	....	....	66.2	59.5	....	....	....	0	0	.01	0	0	....	....	....
22..........	80	.437	61	....	....	65.2	60	....	.19	....	0	0	0	0	0	....	....	....
23..........	80	.417	59.5	....	....	63.5	59.8	....	.04	....	0	0	.01	0	0	....	....	....
24..........	110	.410	61.5	....	....	62.2	59.2	....	....	....	.01	0	0	0	0	....	....	....
25..........	77	.409	62.5	....	....	62.8	59	....	....	....	0	0	.02	0	0	....	....	....
26..........	54	.485	65.8	....	....	62.5	59	....	....	....	0	0	0	0	0	....	....	9.4
27..........	75	.470	69.5	....	....	64	59	....	....	....	0	0	0	0	0	....	....	....
28..........	104	.584	71.2	....	....	65.5	59.5	....	.26	....	0	0	0	0	0	....	....	....
29..........	123	.576	72.2	....	....	67.8	60.2	....	.25	....	0	0	0	0	0	....	....	....
30..........	119	.569	66.5	....	....	67.5	61	....	.91	....	.22	0	.14	0	0	....	....	....

GRAEFENBURG HYDROPHYSICAL RECORDS—(*Continued*).

Month of July, 1906.

DAY.	Total wind movement, 24 hours.	Mean vapor pressure.	Mean air temperature.	Mean water temperature.	Mean of maximum and minimum thermometers.	MEAN SOIL TEMPERATURE.		Mean barometer. *Inches.*	Precipitation. *Inches.*	Evaporation from water. *Inches.*	PERCOLATION THROUGH LYSIMETERS. *Inches.*					ACCUMULATED SNOW ON GROUND IN WOODS. *Inches.*		Depth to water in well. *Feet.*
						2 inches depth.	24 inches depth.				Clay, long grass. 1	Clay, short grass. 2	Clay and loam, bare. 3	Sand, long grass. 4	Sand, bare. 5	Snow.	Water.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1	49	.475	62.8	....	....	66.2	61.0	....	.02	....	.01	.01	.10	0	0	....	....	....
2	42	.527	67.8	....	....	66.5	61.2	....	....	....	0	0	0	0	0	....	....	....
3	43	.587	68.2	....	....	66.8	61.5	....	.33	....	0	0	0	0	0	....	....	....
4	78	.482	59.8	....	....	66.0	61.5	....	.19	....	0	0	0	0	0	....	....	....
5	71	.328	63.2	....	....	64.2	61.2	....	....	....	.03	0	.18	0	.16	....	....	....
6	82	.386	64.2	....	....	64.8	61.0	....	....	....	0	0	0	0	0	....	....	....
7	29	.517	69.5	....	....	66.2	61.0	....	....	....	.01	0	.01	0	.04	....	....	....
8	59	.532	71.0	....	....	67.2	61.2	....	.62	....	0	0	0	0	0	....	....	....
9	70	.553	66.2	....	....	66.2	61.8	....	.12	....	.09	0	.13	0	.01	....	....	....
10	48	.491	63.2	....	....	65.8	61.5	....	.30	....	.13	0	.19	0	.11	....	....	....
11	60	.443	65.0	....	....	65.8	61.2	....	....	....	.02	0	.06	0	.13	....	....	....
12	69	.468	67.2	....	....	66.8	61.5	....	....	....	.02	0	.04	0	.06	....	....	....
13	36	.525	69.5	....	....	68.0	61.8	....	....	....	.02	0	0	0	0	....	....	....
14	53	.546	71.8	....	....	69.2	62.2	....	....	....	0	0	0	0	0	....	....	....
15	33	.605	72.0	....	....	68.5	62.5	....	....	....	0	0	0	0	0	....	....	....
16	86	.608	71.8	....	....	69.2	63.0	....	.13	....	0	0	0	0	0	....	....	....
17	62	.556	66.8	....	....	68.8	63.2	....	.06	....	.01	0	.01	0	.01	....	....	....
18	514	.434	67.8	....	....	67.2	62.8	....	....	....	0	0	0	0	.02	....	....	....
19	332	.490	69.8	....	....	66.5	63.0	....	....	....	0	0	0	0	.01	....	....	....
20	251	.667	75.8	....	....	68.8	63.0	....	....	....	0	0	0	0	0	....	....	....
21	75	.632	73.0	....	....	70.0	63.5	....	.10	....	0	0	0	0	*a*	....	....	....
22	60	.604	72.0	....	....	71.0	64.0	....	.03	....	0	0	0	0	*a*	....	....	....
23	76	.520	64.5	....	....	70.0	64.0	....	.01	....	0	0	0	0	*a*	....	....	....
24	68	.392	60.5	....	....	67.2	64.0	....	....	....	0	0	0	0	*a*	....	....	....
25	65	.409	66.5	....	....	66.0	63.5	....	....	....	0	0	0	0	*a*	....	....	....
26	82	.446	66.5	....	....	66.2	63.2	....	....	....	0	0	0	0	*a*	....	....	....
27	89	.518	68.5	....	....	67.5	63.0	....	T	....	0	0	0	0	*a*	....	....	....
28	127	.570	68.2	....	....	68.8	63.5	....	.01	....	0	0	0	0	*a*	....	....	....
29	143	.615	70.8	....	....	68.5	63.5	....	.08	....	0	0	0	0	*a*	....	....	....
30	97	.585	70.2	....	....	69.0	64.0	....	.24	....	0	0	0	0	*a*	....	....	....
31	48	.466	68.0	....	....	69.8	64.0	....	....	....	0	0	0	0	*a*	....	....	....

a No record.

GRAEFENBURG HYDROPHYSICAL RECORDS —(*Continued*).

Month of August, 1906.

DAY	Total wind movement, 24 hours.	Mean vapor pressure.	Mean air temperature.	Mean water temperature.	Mean of maximum and minimum thermometers.	MEAN SOIL TEMPERATURE.		Mean barometer. *Inches.*	Precipitation. *Inches.*	Evaporation from water. *Inches.*	PERCOLATION THROUGH LYSIMETER. *Inches.*					ACCUMULATED SNOW ON GROUND IN WOODS. *Inches.*		Depth to water in well. *Feet.*
						2 inches depth.	24 inches depth.				Clay, long grass. 1	Clay, short grass. 2	Clay and loam, bare. 3	Sand, long grass. 4	Sand, bare. 5	Snow.	Water.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1..........	103	.451	66.8	....	....	69.8	64.5	....	....	....	0	0	0	0	0	....	....	....
2..........	138	.509	67.2	....	....	69.5	65	....	.02	....	0	0	0	0	0	....	....	....
3..........	115	.608	67.5	....	....	67.5	65	....	.44	....	0	0	0	0	0	....	....	....
4..........	105	.571	73.2	....	....	70.2	64.8	....	.04	....	0	0	0	0	0	....	....	....
5..........	65	.649	75.8	....	....	68.2	65	....	.12	....	0	0	0	0	0	....	....	....
6..........	104	.647	73	....	....	73.5	66.2	....	.17	....	0	0	0	0	0	....	....	....
7..........	37	.567	69.2	....	....	73.5	67	....	T	....	0	0	0	0	0	....	....	....
8..........	48	.561	70.8	....	....	73.8	67.2	....	....	....	0	0	0	0	0	....	....	14.1
9..........	97	.533	71.2	....	....	73.5	67.5	....	....	....	0	0	0	0	0	....	....	....
10..........	126	.591	68.5	....	....	69	67.5	....	.02	....	0	0	0	0	0	....	....	....
11..........	106	.604	71	....	....	71	67	....	....	....	0	0	0	0	0	....	....	....
12..........	73	.391	60.8	....	....	69.5	66.8	....	....	....	0	0	0	0	0	....	....	....
13..........	59	.342	60.8	....	....	66.5	66.2	....	....	....	0	0	0	0	0	....	....	....
14..........	110	.406	60.8	....	....	66.2	66.2	....	....	....	0	0	0	0	0	....	....	14.3
15..........	83	.329	59.8	....	....	65.5	64.8	....	....	....	0	0	0	0	0	....	....	....
16..........	116	.380	66.5	....	....	66.8	64.5	....	....	....	0	0	0	0	0	....	....	....
17..........	33	.516	71.5	....	....	70	65	....	....	....	0	0	0	0	0	....	....	....
18..........	159	.591	74.2	....	....	73	65.8	....	....	....	0	0	0	0	0	....	....	....
19..........	76	.688	74.2	....	....	74	66.8	....	.01	....	0	0	0	0	0	....	....	....
20..........	110	.663	69.5	....	....	73.5	67.5	....	.0[illegible]	....	0	0	0	0	0	....	....	14.6
21..........	66	.665	73.8	....	....	72.8	67.5	....	T	....	0	0	0	0	0	....	....	....
22..........	70	.702	75.2	....	....	73.8	68	....	....	....	0	0	0	0	0	....	....	....
23..........	98	.591	69.8	....	....	74.5	68.5	....	....	....	0	0	0	0	0	....	....	....
24..........	162	.359	63.2	....	....	70.5	68.5	....	....	....	0	0	0	0	0	....	....	....
25..........	116	.391	63.5	....	....	66	67.8	....	....	....	0	0	0	0	0	....	....	....
26..........	103	.609	69.8	....	....	69.8	66.8	....	.12	....	0	0	0	0	0	....	....	....
27..........	101	.564	63.5	....	....	69.5	67	....	.69	....	0	0	0	0	0	....	....	15.1
28..........	74	.438	63.8	....	....	68	66.8	....	....	....	0	0	0	0	0	....	....	....
29..........	155	.458	66.5	....	....	66.8	65.8	....	....	....	0	0	0	0	0	....	....	....
30..........	127	.479	65	....	....	68	66	....	....	....	0	0	0	0	0	....	....	....
31..........	213	.312	58.2	....	....	65.2	65.8	....	....	....	0	0	0	0	0	....	....	....

GRAEFENBURG HYDROPHYSICAL RECORDS—(*Continued*).

Month of September, 1906.

DAY.	Total wind movement, 24 hours.	Mean vapor pressure.	Mean air temperature.	Mean water temperature.	Mean of maximum and minimum thermometers.	MEAN SOIL TEMPERATURE.		Mean barometer. *Inches.*	Precipitation. *Inches.*	Evaporation from water. *Inches.*	PERCOLATION THROUGH LYSIMETER. *Inches.*					ACCUMULATED SNOW ON GROUND IN WOODS. *Inches.*		Depth to water in well. *Feet.*
						2 inches depth.	24 inches depth.				Clay, long grass. 1	Clay, short grass. 2	Clay and loam, bare. 3	Sand, long grass. 4	Sand, bare. 5	Snow.	Water.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1	135	.235	53.8	...	...	62.2	64.8	...	...	...	0	0	0	0	0	...	...	...
2	248	.468	65.5	...	...	61.8	63.8	...	.04	...	0	0	0	0	0	...	...	...
3	248	.407	59.5	...	...	65.2	63.8	...	.17	...	0	0	0	0	0	...	...	15.4
4	130	.264	50.8	...	...	60.2	63.2	...	...	...	0	0	0	0	0	...	...	...
5	111	.331	55	...	...	59.8	62.2	...	...	...	0	0	0	0	0	...	...	...
6	118	.397	64.2	...	...	63.5	62.2	...	...	...	0	0	0	0	0	...	...	...
7	130	.466	68.2	...	...	65.5	62.8	...	...	...	0	0	0	0	0	...	...	...
8	75	.536	67	...	...	68	63.5	...	...	...	0	0	0	0	0	...	...	...
9	128	.489	67.8	...	...	68.5	64	...	...	...	0	0	0	0	0	...	...	...
10	118	.517	68.2	...	...	68.8	65.5	...	...	...	0	0	0	0	0	...	...	...
11	96	.565	69.2	...	...	69.2	65	...	...	...	0	0	0	0	0	...	...	15.8
12	138	.644	71.5	...	...	72.2	65.8	...	...	...	0	0	0	0	0	...	...	...
13	238	.521	68.8	...	...	72	66.5	...	.14	...	0	0	0	0	0	...	...	...
14	98	.304	53.5	...	...	65.8	66.2	...	...	...	0	0	0	0	0	...	...	...
15	149	.282	52.8	...	...	60.8	65.2	...	...	...	0	0	0	0	0	...	...	...
16	148	.308	57	...	...	60.8	63.8	...	...	...	0	0	0	0	0	...	...	...
17	101	.423	62	...	...	63.5	63	...	...	...	0	0	0	0	0	...	...	...
18	89	.537	67.8	...	...	68.5	63.5	...	...	...	0	0	0	0	0	...	...	16.0
19	86	.516	68.5	...	...	70.2	64	...	...	...	0	0	0	0	0	...	...	...
20	118	.540	66.8	...	...	67.5	65	...	.50	...	0	0	0	0	0	...	...	...
21	92	.573	68	...	...	70	65	...	.02	...	0	0	0	0	0	...	...	...
22	200	.482	61	...	...	65	65.2	...	.60	...	0	0	0	0	0	...	...	...
23	134	.346	53	...	...	64	64.8	...	.17	...	0	0	0	0	0	...	...	...
24	79	.202	40.5	...	...	56	63	...	...	...	0	0	0	0	0	...	...	...
25	96	.219	48.8	...	...	58	61.5	...	...	...	0	0	0	0	0	...	...	16.2
26	238	.380	59	...	...	56.5	60.5	...	.34	...	0	0	0	0	0	...	...	...
27	132	.365	55.8	...	...	60.5	60.2	...	T	...	0	0	0	0	0	...	...	...
28	112	.310	54.2	...	...	58	60.2	...	...	...	0	0	0	0	0	...	...	...
29	201	.414	61	...	...	58.5	60.2	...	.42	...	0	0	0	0	0	...	...	...
30	80	.250	44.2	...	...	58.2	60	...	T	...	0	0	0	0	0	...	...	...

GRAEFENBURG HYDROPHYSICAL RECORDS —(*Continued*).

Month of October, 1906.

DAY.	Total wind movement, 24 hours.	Mean vapor pressure.	Mean air temperature.	Mean water temperature.	Mean of maximum and minimum thermometers.	MEAN SOIL TEMPERATURE.		Mean barometer. *Inches.*	Precipitation. *Inches.*	Evaporation from water. *Inches.*	PERCOLATION THROUGH LYSIMETER. *Inches.*					ACCUMULATED SNOW ON GROUND IN WOODS. *Inches.*		Depth to water in well. *Feet.*
						2 inches depth.	24 inches depth.				Clay, long grass. 1	Clay, short grass. 2	Clay and loam, bare. 3	Sand, long grass. 4	Sand, bare. 5	Snow.	Water.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1..........	119	.213	44.2	......	......	51.5	59	......	......	......	0	0	0	0	0	......	......	......
2..........	67	.338	52	......	......	54.2	58	......	......	......	0	0	0	0	0	......	......	......
3..........	78	.382	56	......	......	58	58	......	......	......	0	0	0	0	0	......	......	......
4..........	138	.343	57.5	......	......	57	58.5	......	......	......	0	0	0	0	0	......	......	......
5..........	122	.483	61.2	......	......	59	58.5	......	.12	......	0	0	0	0	0	......	......	†16.2
6..........	264	.354	49.2	......	......	60	59	......	1.01	......	0	0	0	0	0	......	......	......
7..........	139	.207	39.8	......	......	50.5	58.5	......	.04	......	0	0	0	0	0	......	......	......
8..........	205	.233	48.5	......	......	47.5	56	......	T	......	0	0	0	0	0	......	......	......
9..........	140	.292	46.5	......	......	51	54.8	......	.38	......	0	0	0	0	0	......	......	......
10..........	92	.210	38.8	......	......	49.2	54.5	......	.17	......	0	0	0	0	0	......	......	......
11..........	108	.182	33.5	......	......	45.5	53.8	......	.19	......	0	0	0	0	0	......	......	......
12..........	107	.137	32.5	......	......	43.2	52	......	......	......	0	0	0	0	0	......	......	......
13..........	99	.145	40.5	......	......	43.2	50.8	......	......	......	0	0	0	0	0	......	......	......
14..........	56	.214	45.8	......	......	45.8	50.2	......	......	......	0	0	0	0	0	......	......	......
15..........	58	.310	52.2	......	......	50	50.8	......	......	......	0	0	0	0	0	......	......	......
16..........	169	.311	54.8	......	......	50.2	51.8	......	......	......	0	0	0	0	0	......	......	16.2
17..........	175	.248	46.8	......	......	49.5	52.5	......	......	......	0	0	.01	0	0	......	......	......
18..........	320	.314	49.8	......	......	48.2	52.2	......	......	......	.06	0	.01	0	0	......	......	......
19..........	204	.394	55	......	......	52.5	52.2	......	1.55	......	.72	0	.31	0	0	......	......	......
20..........	82	.300	49.2	......	......	54	52.8	......	......	......	.19	0	.30	0	.16	......	......	......
21..........	217	.295	48.5	......	......	52	53	......	......	......	.04	0	.06	0	.18	......	......	......
22..........	131	.337	52.8	......	......	52	53	......	.02	......	.02	0	.03	0	.06	......	......	......
23..........	127	.287	45.2	......	......	53	53	......	T	......	.01	0	.02	0	.04	......	......	......
24..........	240	.302	49.5	......	......	48.2	52.8	......	.34	......	......	0	.01	0	.02	......	......	15.9
25..........	156	.264	47	......	......	51	52	......	......	......	.01	0	.01	0	.03	......	......	......
26..........	129	.248	46.2	......	......	49	52	......	......	......	.01	0	.05	0	.06	......	......	......
27..........	253	.265	49.8	......	......	48.5	51.5	......	.16	......	.02	0	.02	0	.04	......	......	......
28..........	275	.175	37	......	......	45	51	......	.04	......	.01	0	.02	0	.03	......	......	......
29..........	176	.158	34	......	......	40	49.5	......	.02	......	.01	0	.04	0	.03	......	......	......
30..........	96	.186	35.2	......	......	39.8	47.8	......	.05	......	.02	0	.04	0	.04	......	......	......
31..........	101	.134	29.5	......	......	39.2	47	......	.01	......	......	......	......	......	......	......	......	15.7

GRAEFENBURG HYDROPHYSICAL RECORDS—(*Continued*).

Month of November, 1906.

DAY.	Total wind movement, 24 hours.	Mean vapor pressure.	Mean air temperature.	Mean water temperature.	Mean of maximum and minimum thermometers.	MEAN SOIL TEMPERATURE.		Mean barometer. *Inches.*	Precipitation. *Inches.*	Evaporation from water. *Inches.*	PERCOLATION THROUGH LYSIMETER. *Inches.*					ACCUMULATED SNOW ON GROUND IN WOODS. *Inches.*		Depth to water in well. *Feet.*
						2 inches depth.	24 inches depth.				Clay, long grass. 1	Clay, short grass. 2	Clay and loam, bare. 3	Sand, long grass. 4	Sand, bare. 5	Snow.	Water.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1	243	.108	27.2			36	45.8				0	0	.02	0	0	0	0	
2	167	.161	33.5			34.8	44.8				.02	0	.02	0	.02			
3	153	.181	36.5			39.5	44				.02	0	.02	0	.01			
4	108	.129	31.5			38.5	44				.01	0	.01	0	0			
5	88	.112	33.8			38	44				0	0	0	0	.01			
6	175	.112	31.2			36.8	43.8				.01	0	.01	0	0			15.7
7	191	.110	30			35.5	43				0	0	0	0	0			
8	84	.118	27			35.5	42.2				.01	0	0	0	0			
9	184	.148	30.8			34.2	41.8		.18		0	0	0	0	0			
10	130	.171	36.8			38	41.5		.05		.01	0	.01	0	.01			
11	144	.179	32.2			36.2	42		*.61		.01	0	.02	0	0			
12	160	.135	27.2			36	41.8		*.04		.01	0	.08	0	.02			
13	172	.115	24.8			35.5	41		*.10		0	0	.03	0	.02			15.3
14	170	.100	22.8			35	40.8				.07	.01	.12	0	.13			
15	209	.112	24.5			34.8	40.5		* 39		.05	0	.12	0	.10			
16	273	.114	26.2			35	40				.05	.01	.09	0	.02			
17	143	.171	36.5			34.8	40		.01		.03	0	.12	0	.02			
18	260	.306	51			39.2	40				2.02	*a*2.84	*a*1.18	.07	.35			
19	147	.204	41			42.2	40				.11	.11	.13	.01	.20			
20	73	.200	36.2			40.8	41.5		.05		.04	.05	.07	0	.13			13.
21	308	.209	36.2			37	41.5		.20		.09	.09	.08	0	.09			
22	324	.202	37.5			39.5	41		*.02		.07	.10	.11	.04	.14			
23	264	.171	32.2			35.8	41		*.03		.05	.07	.07	.04	.11			
24	234	.158	32.8			35	40.2		T		.06	.03	.04	.05	.07			
25	129	.194	36.8			35.5	39.8		T		.03	.04	.04	.02	.07			
26	182	.212	41			37.8	39.5		.07		.04	.03	.04	.04	.05			10.5
27	234	.209	37.2			39.8	40.2		.11		.04	.04	.05	.03	.03			
28	216	.136	27.5			36.5	40		*.11		.08	.09	.11	.08	.08			
29	167	.085	19.8			34.2	39.5				.09	.07	.06	.06	.07			
30	203	.152	34.2			33.2	38.8		T		.05	.05	.04	.02	.05	T	T	

*Snow. *a* Amount before gage cans overflowed

GRAEFENBURG HYDROPHYSICAL RECORDS—(*Concluded*).

Month of December, 1906.

DAY.	Total wind movement, 24 hours.	Mean vapor pressure.	Mean air temperature.	Mean water temperature.	Mean of maximum and minimum thermometers.	MEAN SOIL TEMPERATURE. 2 inches depth.	MEAN SOIL TEMPERATURE. 24 inches depth.	Mean barometer. *Inches.*	Precipitation. *Inches.*	Evaporation from water. *Inches.*	PERCOLATION THROUGH LYSIMETER. *Inches.* 1 Clay, long grass.	2 Clay, short grass.	3 Clay and loam, bare.	4 Sand, long grass.	5 Sand, bare.	ACCUMULATED SNOW ON GROUND IN WOODS. *Inches.* Snow.	Water.	Depth to water in well. *Feet.*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1	322	.106	22.8	......	......	33.8	38.2	......	*.02	......	.09	.03	.08	.01	.05	0	0	......
2	208	.074	15.2	......	......	32.8	38.0	......	*.01	......	.07	.05	.04	.04	.06	......	......	......
3	227	.064	7.5	......	......	32.0	37.5	......	*.04	......	.05	.03	.03	0	0	......	......	......
4	170	.059	9.8	......	......	31.5	37.0	......	*.01	......	.02	.04	.02	.01	.01	......	......	......
5	222	.113	23.0	......	......	31.5	37.0	......	.57	......	.02	.01	.01	0	0	......	......	......
6	350	.105	23.0	......	......	32.0	36.8	......	.08	......	*a*2.64	*a*2.63	.06	.04	1.65	......	......	......
7	262	.026	—2.0	......	......	30.8	36.2	......	......	......	.11	2.48	0	.01	.74	......	......	......
8	177	.042	5.5	......	......	27.0	35.8	......	*.04	......	.03	.03	0	0	0	......	......	......
9	366	.074	16.5	......	......	28.8	35.5	......	.09	......	0	0	.01	0	0	......	......	......
10	249	.116	24.8	......	......	29.0	35.0	......	.49	......	.01	0	0	0	0	......	......	6.8
11	132	.049	6.2	......	......	30.0	35.0	......	T	......	.01	0	.01	0	0	......	......	......
12	165	.071	21.2	......	......	29.5	35.0	......	......	......	.01	0	0	0	0	......	......	......
13	124	.114	28.0	......	......	30.2	35.0	......	......	......	.02	0	.01	0	0	......	......	......
14	318	.135	24.5	......	......	30.8	35.0	......	.40	......	0	.01	0	0	0	......	......	......
15	268	.178	34.5	......	......	32.2	35.0	......	.07	......	1.12	3.50	1.31	2.78	2.88	......	......	......
16	83	.120	28.8	......	......	31.2	34.5	......	......	......	.43	2.24	.02	†	1.20	......	......	......
17	169	.092	22.5	......	......	31.0	34.5	......	......	......	.02	.01	0	......	†	......	......	......
18	143	.046	8.2	......	......	27.2	34.2	......	......	......	.02	.01	0	......	......	......	......	......
19	176	.054	11.2	......	......	24.8	34.0	......	*.02	......	0	0	0	......	......	......	......	......
20	183	.142	27.5	......	......	24.5	34.0	......	*.33	......	0	0	0	......	......	......	......	......
21	128	.164	30.5	......	......	30.0	34.2	......	......	......	.03	0	0	......	......	......	......	......
22	214	.088	17.5	......	......	30.5	34.5	......	......	......	.07	0	0	......	......	......	......	......
23	178	.030	2.5	......	......	28.5	34.0	......	......	......	0	0	0	......	......	......	......	......
24	252	.031	0.2	......	......	24.0	33.8	......	......	......	0	0	0	......	......	......	......	7.8
25	407	.059	14.0	......	......	23.8	33.5	......	......	......	0	0	0	......	......	......	......	......
26	271	.086	25.0	......	......	25.0	33.0	......	......	......	0	0	0	......	......	......	......	......
27	235	.135	31.0	......	......	27.5	32.5	......	......	......	0	0	0	......	......	......	......	......
28	82	.182	34.0	......	......	29.5	32.5	......	......	......	0	0	0	......	......	......	......	......
29	112	.196	35.5	......	......	30.5	32.5	......	......	......	0	0	0	......	......	......	......	......
30	365	.193	34.5	......	......	31.5	32.5	......	......	......	0	0	0	......	......	......	......	......
31	......	......	......	......	......	31.2	32.5	......	......	......	......	......	......	......	......	‡	‡	......

* Snow. † No record. ‡ Trace. *a* Amount before gage can overflowed.

ORISKANY CREEK AT COLEMANS, N. Y.

This gaging station was established August 13, 1904, by Robert E. Horton for U. S. Geological Survey, and was discontinued May 2, 1906. The station was located one-fourth mile below the Reeder's Mills dam. Current-meter measurements have been made from a cableway. The stream becomes obstructed by ice in winter.

Daily Gage Height, in feet, of Oriskany Creek at Colemans, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	1.78	1.6	1.3	2.05	1.02	......	......	......	......	......	......	......
2	1.78	1.32	1.3	1.88	1.05	......	......	......	......	......	......	......
3	1.7	1.28	1.1	1.62	......	......	......	......	......	......	......	......
4	2.25	1.2	2.95	1.8	......	......	......	......	......	......	......	......
5	2.1	1.35	1.78	2.75	......	......	......	......	......	......	......	......
6	1.95	1.25	1.32	2.35	......	......	......	......	......	......	......	......
7	1.58	1.48	1.48	2.0	......	......	......	......	......	......	......	......
8	1.9	1.45	1.32	1.85	......	......	......	......	......	......	......	......
9	1.78	1.5	1.32	1.95	......	......	......	......	......	......	......	......
10	1.95	1.32	1.22	2.65	......	......	......	......	......	......	......	......
11	2.7	1.1	1.22	2.65	......	......	......	......	......	......	......	......
12	2.0	1.58	1.2	2.35	......	......	......	......	......	......	......	......
13	1.9	1.5	1.15	2.02	......	......	......	......	......	......	......	......
14	1.65	1.4	1.12	1.92	......	......	......	......	......	......	......	......
15	1.65	1.38	1.05	2.8	......	......	......	......	......	......	......	......
16	1.5	1.2	1.22	2.1	......	......	......	......	......	......	......	......
17	1.7	1.32	.82	1.48	......	......	......	......	......	......	......	......
18	1.72	1.52	1.22	1.35	......	......	......	......	......	......	......	......
19	1.75	1.48	.92	1.6	......	......	......	......	......	......	......	......
20	1.52	1.15	1.2	1.52	......	......	......	......	......	......	......	......
21	3.05	3.55	1.18	1.48	......	......	......	......	......	......	......	......
22	3.15	2.15	1.08	1.55	......	......	......	......	......	......	......	......
23	2.85	2.02	1.4	1.42	......	......	......	......	......	......	......	......
24	3.45	1.75	1.15	1.38	......	......	......	......	......	......	......	......
25	2.15	1.82	1.1	1.25	......	......	......	......	......	......	......	......
26	1.45	2.05	1.2	1.18	......	......	......	......	......	......	......	......
27	1.45	1.5	3.3	1.2	......	......	......	......	......	......	......	......
28	1.65	1.05	2.5	1.15	......	......	......	......	......	......	......	......
29	1.48	......	2.1	1.12	......	......	......	......	......	......	......	......
30	1.7	......	2.35	1.2	......	......	......	......	......	......	......	......
31	1.7	......	2.95	......	......	......	......	......	......	......	......	......

Current Meter Discharge Measurements of Oriskany Creek at Colemans, N. Y.

DATE.	Hydrographer.	Width.	Area of section.	Gage height.	Discharge.	Remarks.
1906.		*Feet.*	*Square feet.*	*Feet.*	*Second-feet.*	
Sept. 17	E. F. Weeks	75	79	0.49	110	By wading at regular section.

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* Ice conditions from January 1 to March 20; approximate thickness varied from 0.10 foot to 1.0 foot, creek frozen over most of the time.

List of Miscellaneous Discharge Measurements, Made in Oriskany Creek drainage basin, by R. E. Horton and D. L. Mott.

Date.	STREAM.	Locality.	Width.	Area of section.	Gage height.	Discharge.
1906.			*Feet.*	*Sq. feet.*	*Feet.*	*Sec.-feet.*
April 3..	Oriskany creek..	Walesville upper bridge............	60	213	*1.72	322
April 3..	Small stream....	Just below Walesville	15.4	10.4	......	7.9

NINE MILE CREEK AT POWELL'S BRIDGE, NEAR STITTVILLE, ONEIDA COUNTY, N. Y.

A gaging station was established at Powell's bridge, one mile below the village of Stittville, November 4, 1905, by C. A. Poole. Observations of the stage of the stream are taken each morning and afternoon, from a weight-and-chain gage attached to the bottom chord on the down-stream side of the bridge.

The datum to which all gage readings are added is 481.72, and the elevation of bench mark on west side of the bridge seat of south abutment of bridge is 504,435, Barge canal datum.

Nine Mile creek drains a large portion of the territory on the north side of the Mohawk river between Utica and Rome, emptying into the latter stream near Oriskany. Its channel will be improved and used as a feeder for the diversion of water from West Canada creek to the summit level of the improved Erie canal, according to present plans. The drainage area above the station is 62.6 square miles.

A gaging station was maintained at this point by the U. S. Deep Waterways Commission during their survey in 1898. At that time there was a dam about 200 feet below the bridge, which has since been destroyed, leaving the flow unimpeded. The channel is of rock, of uniform cross-section and straight for several hundred feet each way from the bridge, and the conditions are very favorable for current-meter discharge measurements.

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* Gage at Colemans.

*Drainage Areas of Nine Mile Creek.**

LOCALITY.	AREA IN SQUARE MILES.	
	Place to place.	Total.
Above South Trenton	24.3	24.3
South Trenton to Powell's bridge	19.0	43.3
Powell's bridge to mouth	24.4	67.7

The most notable flood on Nine Mile creek occurred August 24, 1898. A survey of the dam of Raymer Powell was made by the U. S. Deep Waterways Commission at the time, which has been utilized in calculating the discharge. According to Mr. Powell's statement the flood advanced down the creek in a standing wave possibly due to temporary detention preceding the failure of structures further up-stream.

An hour or two elapsed from the beginning of the heavy rain until the approach of the flood wave. The flood reached its culminating point in the course of an hour or less, and remained near its maximum stage for about an hour, after which it rapidly receded to about the ordinary flood stage, then receding slowly until the stream returned to a normal summer condition.

The Estimated Flood Discharge is as Follows:

OCCASION.	DISCHARGE.	
	Second-feet.	Second-feet per square mile.
August 24, 1898, maximum stage	8,000	118.2
Ordinary spring freshet discharge	1,743	25.7
High spring freshet discharge	3,203	47.3
September, 1905	3,000	44.3

It is estimated that the flood of August 24, 1898, did not remain above a 3,000 c. f. s. stage longer than 12 hours, and it is probable that the total run-off resulting from this flood did not exceed one to one and one-half inches. The flood may, therefore, be readily accounted for as the natural result of the measured rainfall of the preceding day.

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* From U. S. Geological Survey topographic map.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Nine Mile Creek near Stittville, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	......	......	......	......	......	......	......	......	484.2
2	......	......	......	......	......	......	......	......	......	......	......	484.2
3	......	......	......	......	......	......	......	......	......	......	......	487.2
4	......	......	......	......	......	......	......	......	......	......	484.9	485.1
5	......	......	......	......	......	......	......	......	......	......	484.2	484.3
6	......	......	......	......	......	......	......	......	......	......	485.6	484.2
7	......	......	......	......	......	......	......	......	......	......	484.6	484.2
8	......	......	......	......	......	......	......	......	......	......	484.6	484.1
9	......	......	......	......	......	......	......	......	......	......	484.4	484.2
10	......	......	......	......	......	......	......	......	......	......	484.4	484.3
11	......	......	......	......	......	......	......	......	......	......	484.3	484.3
12	......	......	......	......	......	......	......	......	......	......	484.4	484.1
13	......	......	......	......	......	......	......	......	......	......	484.4	484.0
14	......	......	......	......	......	......	......	......	......	......	484.3	483.9
15	......	......	......	......	......	......	......	......	......	......	484.3	484.1
16	......	......	......	......	......	......	......	......	......	......	484.4	484.1
17	......	......	......	......	......	......	......	......	......	......	484.3	484.3
18	......	......	......	......	......	......	......	......	......	......	484.3	484.4
19	......	......	......	......	......	......	......	......	......	......	484.3	484.1
20	......	......	......	......	......	......	......	......	......	......	484.2	484.2
21	......	......	......	......	......	......	......	......	......	......	484.1	484.1
22	......	......	......	......	......	......	......	......	......	......	484.0	484.7
23	......	......	......	......	......	......	......	......	......	......	484.0	484.6
24	......	......	......	......	......	......	......	......	......	......	483.9	484.1
25	......	......	......	......	......	......	......	......	......	......	484.2	484.2
26	......	......	......	......	......	......	......	......	......	......	484.2	484.3
27	......	......	......	......	......	......	......	......	......	......	484.2	484.2
28	......	......	......	......	......	......	......	......	......	......	484.2	484.2
29	......	......	......	......	......	......	......	......	......	......	486.8	484.3
30	......	......	......	......	......	......	......	......	......	......	484.9	484.2
31	......	......	......	......	......	......	......	......	......	......	......	484.2

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Nine Mile Creek near Stittville, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	484.32	484.22	484.22	484.52	483.92	483.72	484.82	483.62	483.52	483.67	484.07	484.37
2	484.42	484.22	484.32	484.42	483.92	483.72	483.37	483.62	483.52	483.57	484.27	484.12
3	484.22	484.32	484.32	484.22	485.22	483.72	483.72	483.62	483.57	483.67	483.97	484.37
4	484.22	484.22	484.22	484.42	484.62	483.92	484.12	484.22	483.52	483.72	483.87	484.52
5	484.52	484.32	484.22	484.72	484.22	483.72	483.87	484.12	483.52	484.02	483.87	484.52
6	484.72	484.22	484.22	484.22	484.22	483.82	484.17	484.02	483.52	483.92	483.77	484.67
7	484.62	484.22	484.22	484.22	484.22	483.72	483.67	484.22	483.52	484.17	483.82	484.77
8	484.42	484.32	484.12	484.22	484.12	483.72	483.62	484.02	483.42	483.77	483.87	484.47
9	484.32	484.32	484.12	484.22	484.02	483.72	483.87	483.72	483.52	483.82	483.97	484.52
10	484.22	484.32	484.12	484.22	484.02	483.77	484.32	483.72	483.67	483.72	483.97	484.72
11	484.22	484.22	484.22	484.32	484.02	483.77	484.02	483.72	483.57	484.22	483.97	484.92
12	484.32	484.22	484.12	484.32	484.22	483.52	483.67	483.72	483.57	483.87	484.07	484.92
13	484.22	484.22	484.12	484.52	484.22	483.52	484.07	483.77	483.57	483.82	484.42	484.82
14	484.12	484.42	484.22	484.52	484.12	483.42	483.67	483.67	483.57	483.87	484.12	484.87
15	484.22	484.32	484.22	484.42	484.12	483.47	483.67	483.67	483.52	483.82	484.37	486.22
16	484.22	484.22	484.22	484.22	484.02	483.62	483.57	483.57	483.47	483.77	484.17	485.42
17	484.32	484.22	484.22	484.22	483.92	483.82	483.72	483.52	483.52	483.77	484.42	485.22
18	484.22	484.22	484.12	484.22	483.82	483.82	483.57	483.52	483.52	483.77	484.77	484.32
19	484.42	484.22	484.12	484.32	483.82	483.72	483.47	483.52	483.42	483.97	484.97	484.52
20	484.62	484.22	484.22	484.32	484.12	483.67	483.32	483.62	483.52	485.42	484.92	484.82
21	484.72	484.22	484.12	484.22	483.92	483.57	483.37	484.12	483.52	484.32	484.97	484.87
22	485.22	484.32	484.02	484.02	483.72	483.67	483.37	484.02	483.57	484.17	485.02	484.42
23	486.72	484.22	484.02	484.02	483.72	483.72	483.47	483.72	484.27	484.07	485.37	484.17
24	485.72	484.42	484.12	483.92	483.72	483.72	483.47	483.67	483.87	483.97	484.27	484.17
25	484.22	484.32	484.22	483.82	483.62	483.67	483.52	483.67	483.62	483.87	484.22	484.22
26	484.22	484.22	484.22	484.22	483.62	483.57	483.52	483.47	483.57	483.87	484.17	484.27
27	484.12	484.12	484.32	484.22	483.72	483.47	483.52	483.57	483.52	483.97	484.27	484.37
28	484.32	484.22	484.72	484.62	483.82	483.42	483.52	483.62	483.52	484.57	484.32	484.32
29	484.22	......	484.82	484.42	483.72	483.47	483.52	483.62	483.52	484.32	484.52	484.32
30	484.32	......	484.92	484.02	483.82	483.77	483.52	483.52	483.72	484.17	484.27	484.67
31	484.32	......	484.72	......	483.82	......	483.62	483.57	......	484.07	......	486.07

Current Meter Discharge Measurements of Nine Mile Creek near Stittville, N. Y.

DATE.	Hydrographer.	Gage height.	Elevation of water-surface.	Width.	Area of section.	Mean velocity.	Discharge.
1905.		*Feet.*		*Feet.*	*Square feet.*	*Ft. per second.*	*Second-feet.*
Nov. 2	....	2.6	484.3	70.8	92	1.53	141
Nov. 4	....	3.2	484.9	74.8	136	2.75	374
Nov. 15	....	2.2	483.9	69.6	64	1.02	65.2
1906.							
March 3	J. H. McCormick....	3.7	485.4	72.0	170.2	3.71	632
Mar. 31	J. H. McCormick....	3.1	484.8	71.5	127.1	2.82	358
April 6	L. R. Ellis..........	2.8	484.5	70.5	115.7	2.01	234
April 11	L. R. Ellis..........	3.6	485.3	69	158.7	3.68	584
May 24	C. A. Poole.........	2.0	483.7	61	50.9	0.38	19.0
Sept. 17	E. F. Weeks........	1.85	483.57	67	45.6	0.264	12.0
Sept. 17	E. F. Weeks........	1.85	483.57	67	45.4	0.27	12.2
Oct. 5	E. F. Weeks........	2.45	484.17	71	79.1	1.09	86.1

MOHAWK RIVER BELOW STATE DAM AT ROME, N. Y.

Observations begun May 3, 1904. Readings taken each morning.

Elevation of gage zero 426.56 above tide, Barge canal datum, to April 17, 1905; 426.46 after April 17, 1905.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River below State Dam at Rome, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	......	428.9	428.8	428.6	428.8	429.4	428.9	428.9
2	......	......	......	......	......	428.6	428.8	428.6	428.8	......	428.9	428.9
3	......	......	......	......	429.1	428.7	......	428.6	428.8	429.0	428.9	428.8
4	......	......	......	......	428.8	428.7	428.4	428.6	......	428.9	428.8	......
5	......	......	......	......	428.8	......	428.4	428.4	428.8	428.9	428.8	428.8
6	......	......	......	......	429.3	429.3	429.0	429.4	428.7	429.1	......	428.8
7	......	......	......	......	429.0	429.0	428.7	......	428.6	429.0	428.6	428.8
8	......	......	......	......	428.8	428.7	428.7	428.4	428.2	429.0	428.6	428.8
9	......	......	......	......	428.1	430.6	428.4	428.4	429.0	......	428.8	428.8
10	......	......	......	......	428.8	429.3	......	428.4	429.0	429.6	428.6	428.9
11	......	......	......	......	428.9	429.1	428.6	428.6	......	432.1	428.6	......
12	......	......	......	......	428.0	428.9	428.6	428.4	428.6	429.9	428.6	428.8
13	......	......	......	......	428.0	428.9	428.8	428.4	428.7	429.6	......	428.8
14	......	......	......	......	427.9	428.8	428.7	......	428.2	429.4	428.7	428.8
15	......	......	......	......	429.2	429.0	428.6	428.1	429.2	429.2	428.6	428.8
16	......	......	......	......	429.6	429.0	428.4	428.1	428.9	......	428.6	428.8
17	......	......	......	......	429.2	428.9	......	428.1	428.6	428.9	428.6	428.8
18	......	......	......	......	428.9	428.8	428.6	428.1	......	428.9	428.6	......
19	......	......	......	......	428.7	......	428.9	428.1	429.1	428.9	428.6	428.8
20	......	......	......	......	430.1	428.6	428.8	428.1	429.0	428.9	......	428.8
21	......	......	......	......	429.3	428.7	428.7	*435.6	430.0	428.9	428.6	428.8
22	......	......	......	......	428.6	428.7	428.4	429.6	429.2	430.6	428.4	428.8
23	......	......	......	......	428.6	428.7	428.4	430.6	429.1	......	428.4	428.9
24	......	......	......	......	428.6	428.7	......	429.4	428.9	429.0	428.4	428.9
25	......	......	......	......	428.7	428.6	428.6	429.2	......	429.2	428.4	......
26	......	......	......	......	428.7	......	428.6	429.0	429.6	429.2	428.4	428.9
27	......	......	......	......	429.4	428.4	429.0	429.0	429.4	429.1	......	429.1
28	......	......	......	......	429.6	428.5	428.6	......	429.2	429.1	428.1	434.4
29	......	......	......	......	428.7	428.4	429.4	428.8	429.0	429.1	428.9	431.6
30	......	......	......	......	428.9	428.8	429.3	428.8	431.0	......	428.1	431.6
31	......	......	......	......	428.9	......	......	428.8	......	428.9	......	431.6

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* Record doubtful.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River below State Dam at Rome, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	.....	430.2	429.2	433.6	429.4	428.1	428.5	429.3	428.7	.....	431.0	429.6
2	432.0	430.1	429.2	.....	428.7	428.1	431.1	429.2	428.5	428.8	430.0	429.5
3	431.8	430.1	429.1	430.7	428.9	428.1	430.3	428.8	434.8	429.5	429.5	435.2
4	431.6	429.9	429.1	433.6	428.8	.....	429.7	428.7	433.5	429.2	429.9	430.7
5	430.6	.....	.....	434.6	428.7	428.8	429.6	428.7	430.0	429.1	.....	430.0
6	430.2	429.8	429.1	432.3	429.7	429 5	428.7	.....	429.7	428.7	430.5	430.0
7	429.6	429.8	429.1	431.1	430.4	429.5	428.8	429.3	429.9	428.7	431.0	430.2
8	431.7	429.8	429.2	430.8	430.0	430.0	428.7	429.2	429.6	.....	431.0	429.7
9	431.6	429.8	429.3	.....	429.5	428.9	.....	429.0	429.4	428.2	430.5	429.7
10	431.2	429.8	429.3	430.2	429.5	428.9	429.2	428.8	.....	428.2	430.0	.....
11	431.1	429.6	429.3	432.6	429.4	.....	428.1	429.0	428.9	428.2	429.8	429.5
12	431.3	.....	.....	431.4	429.3	429.5	428.1	429.1	429.2	431.2	.....	429.5
13	432.1	429.6	429.1	431.4	429.3	429.0	429.5	.....	428.9	431.2	430.0	429.4
14	431.9	429 6	429.1	430.6	.....	428.8	430.1	429.2	428.9	430.4	429.5	429.4
15	.....	429.5	429.2	430.1	429.5	428.2	429.7	429.3	429.0	.....	429,5	429.4
16	431.6	429.5	429.2	.....	429.3	428.2	.....	430.8	429.0	429.3	429.5	429.4
17	431.6	429.5	429.3	429.7	429.2	429.0	428.7	429.5	.....	429.2	429.5	.....
18	431.6	429.4	429.3	429.7	428.5	.....	428.7	429.2	433.0	429.1	429.5	429.5
19	431.8	.....	.....	429.5	428.1	429.8	428.7	428.9	429.6	433.1	.....	429.5
20	431.7	429.4	431.6	429.6	428.1	429.8	428.8	.....	429.7	429.9	429.3	429.4
21	431.6	429.4	430.6	432.3	.....	429.3	428.8	428.9	429.5	430.0	429.0	429.8
22	.....	429.5	430.4	430.7	428.1	430.1	428.8	428.8	429.3	.....	429.0	432.1
23	430.6	429.5	430.2	.....	429.0	429.3	.....	428.8	429.3	429.6	429.2	430.9
24	430.6	429.5	430.3	429.7	428.1	429.0	428.7	428.7	.....	429.4	429.2	.....
25	430.6	429.5	432.1	429.7	428.1	.....	428.7	428.7	429.0	429.4	429.7	429.5
26	430.4	.....	434.6	429.5	428.1	430.5	428.7	428.8	428.8	429.3	.....	429.4
27	430.2	429.3	433.3	429.5	428.9	429.5	428.7	.....	428.8	429.2	429.2	429.4
28	430.0	429.3	433.3	429.3	.....	429.5	428.3	428.5	428.8	429.2	429.2	429.4
29	.....	.....	434.1	428.8	428.1	429.1	428.5	428.7	428.9	.....	432.5	429.9
30	430.4	.....	434.6	430.1	428.1	428.5	.....	428.7	428.8	429.0	430.7	430.1
31	430.2	.....	434.8	.....	428.1	.....	429.9	428.9	.....	429.0	.....	.....

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River below State Dam at Rome, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	429.7	429.7	429.3	.....	428.1	428.1	432.5	428.8	428.2	428.8	429.1	429.6
2	429.6	429.5	429.3	429.5	428.1	428.1	429.2	428.3	428.1	428.5	428.7	.....
3	429.6	429.3	429.3	429.5	429.5	.....	429.2	428.5	428.1	428.3	428.5	429.0
4	429.7	.....	432 5	430.0	429.1	428.1	429.3	429.2	428.1	428.1	.....	429.1
5	429.9	429.3	429.9	431.0	429.1	428.1	429.2	.....	428.1	428.2	428.5	429.1
6	429.7	429.2	429.6	430.0	.....	428.1	429.2	429.5	428.1	428.3	428.5	429.2
7	.....	429.2	429.5	429.8	428.3	428.1	428.9	429.2	428.1	429.5	428.2	429.4
8	429.5	429.2	429.5	.....	428.2	428.1	.....	429.0	428.1	428.9	428.1	429.2
9	429.4	429.2	429.6	430.0	428.2	429.5	429.4	428.7	428.1	428.7	428.1	.....
10	429.3	429.1	429.6	430.1	428.2	.....	430.7	428.5	428.1	429.2	428.1	430.0
11	429.4	.....	.....	430.0	428.1	429.0	430.7	428.5	428.1	429.2	.....	429.5
12	429.4	429.3	429.5	430.5	428.2	428.1	429.3	.....	428.1	429.1	429.4	429.4
13	429.3	429.3	429.0	430.4	.....	428.3	429.2	428.9	428.2	428.9	429.2	429.4
14	.....	429.4	429.2	430.4	429.5	428.3	428.9	428 5	428.2	.....	429.1	429.4
15	429.3	429.3	429.2	435.0	428.5	428.2	.....	428.5	428.1	428.3	428.9	429 5
16	429.5	429.3	429.1	430.5	428.3	428 8	428.7	428.5	.....	428.3	428.8	432.5
17	429.6	429.3	429 0	430.3	428.3	.....	428.8	428.3	428.1	428.3	428.8	430 0
18	429 5	.....	.....	430.0	428.2	429.2	428.9	428.3	428.1	428.2	.....	429.5
19	429.4	429.3	429.1	430.0	428.2	429.1	428.8	.....	428.1	428.2	430.0	429.1
20	429.4	429.3	429.1	429.9	.....	428.9	428.7	428.3	428.1	432.5	429.0	429.1
21	.....	429.7	429.1	429.9	428.1	428.8	428.7	428.3	428.2	.....	429.0	429.4
22	431.0	431.1	429.1	.....	428.1	428.3	.....	428.3	428.2	429.0	430 0	429.3
23	435.2	430.0	429.1	429.3	428.1	428.3	428.7	428.3	428.4	428.9	429.5	.....
24	433.8	430.0	429 1	429.3	428.0	428.8	428.7	428.3	428.3	428.9	429.2	429.2
25	430.5	.....	429.0	429.3	428.2	428 7	428.5	428.3	428.3	428.9	429.2	429.2
26	430.0	430.5	429.1	429.3	428.1	428.5	428.5	.....	428 3	428.9	429.1	429.2
27	429.8	429.7	429.3	429.0	428 1	428.5	428.3	428.3	428.3	429.0	430.0	429.2
28	.....	429.4	433.0	428.2	428.7	428.3	428.5	428.3	428 2	430.3	430.1	429.2
29	429.3	.....	431.1	.....	428.3	428.4	.....	428.2	428.2	429.4	429 9	429.3
30	429.3	.....	430.5	428.1	428.2	428.4	428.8	428.2	429.0	429.3	429.3	429.5
31	429.9	.....	431.0	.....	428.2	.....	429.2	428 2	.....	429.3	.....	429.7

MOHAWK RIVER ABOVE STATE DAM AT ROME, N. Y.

A staff gage is situated in the feeder entrance above the screen racks, and also above the State dam at Rome. Observations were begun May 3, 1904. Readings were taken once each day.

The gage is observed in nearly still water in the approach to the dam, but there is considerable velocity of flow toward the feeder.

The dam is of masonry.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River above State Dam at Rome, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	......	431.6	431.6	431.6	431.4	432.1	431.6	431.6
2	......	......	......	......	......	431.3	431.6	431.6	431.4	......	431.6	431.6
3	......	......	......	......	431.6	431.5	......	431.6	431.5	431.7	431.6	431.6
4	......	......	......	......	431.4	431.5	431.1	431.6	......	431.6	431.5	......
5	......	......	......	......	431.4	......	431.1	431.5	431.5	431.6	431.5	431.6
6	......	......	......	......	432.0	431.9	431.8	432.1	431.4	431.8	......	431.6
7	......	......	......	......	431.8	431.6	431.5	......	431.3	431.7	431.3	431.6
8	......	......	......	......	431.6	431.3	431.5	431.5	430.9	431.7	431.3	431.6
9	......	......	......	......	431.1	433.1	431.3	431.5	431.7	......	431.6	431.6
10	......	......	......	......	431.3	431.9	......	431.5	431.7	422.3	431.4	431.7
11	......	......	......	......	431.3	431.7	431.5	431.7	......	434.1	431.4	......
12	......	......	......	......	431.1	431.6	431.5	431.5	431.3	433.6	431.4	431.7
13	......	......	......	......	430.9	431.6	431.7	431.5	431.4	432.3	......	431.6
14	......	......	......	......	430.8	431.6	431.5	......	430.9	432.1	431.4	431.6
15	......	......	......	......	431.7	431.8	431.4	430.1	431.9	431.9	431.3	431.6
16	......	......	......	......	432.1	431.8	431.2	430.1	431.6	......	431.3	431.6
17	......	......	......	......	431.8	431.6	......	430.1	431.5	431.6	431.4	431.6
18	......	......	......	......	431.6	431.5	431.5	430.2	......	431.6	431.4	......
19	......	......	......	......	431.3	......	431.8	430.2	431.8	431.6	43[illegible].4	431.6
20	......	......	......	......	432.6	431.5	431.7	431.7	431.7	431.6	......	431.6
21	......	......	......	......	431.9	431.5	431.6	431.6	432.7	431.6	431.3	431.6
22	......	......	......	......	431.4	431.6	431.4	432.1	431.9	433.3	431.1	431.6
23	......	......	......	......	431.4	431.6	431.4	433.1	431.8	......	431.2	431.7
24	......	......	......	......	431.4	431.5	......	432.0	431.6	431.7	431.2	431.7
25	......	......	......	......	431.6	431.4	431.5	431.8	......	431.9	431.2	......
26	......	......	......	......	431.6	......	431.5	431.6	432.3	431.9	431.3	431.7
27	......	......	......	......	432.6	431.1	431.9	431.6	432.1	431.8	......	431.9
28	......	......	......	......	432.1	431.2	431.5	......	431.9	431.8	430.6	*436.3
29	......	......	......	......	431.6	431.1	432.3	431.3	431.7	431.9	431.7	*435.5
30	......	......	......	......	431.7	431.7	432.2	431.4	433.7	......	430.6	*435.5
31	......	......	......	......	431.6	......	......	431.4	......	431.6	......	*435.5

*Ice jam.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River, above State Dam at Rome, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	432.6	431.8	435.7	431.9	430.0	431.0	431.8	431.3	......	433.6	432.2
2	434.0	432.6	431.8	......	431.2	430.0	433.6	431.7	431.2	431.4	432.6	432.1
3	433.8	432.6	431.7	433.0	431.4	430.1	432.7	431.4	436.8	432.2	432.2	437.3
4	433.6	432.5	431.7	435.8	431.3	......	432.1	431.3	435.5	431.8	432.6	433.3
5	433.2	......	......	436.6	431.2	430.1	432.1	431.3	432.7	431.7	......	432.6
6	432.8	432.2	431.6	434.6	432.2	431.9	431.2	......	432.3	431.3	433.6	432.6
7	432.4	432.2	431.6	433.5	432.9	431.9	431.4	431.9	432.4	431.3	433.6	432.8
8	434.0	432.2	431.7	433.1	432.5	432.4	431.3	431.8	432.2	......	433.6	432.3
9	433.8	432.2	431.8	......	432.0	431.4	......	431.6	432.0	430.9	433.1	432.3
10	433.6	432.2	431.8	432.6	432.0	431.3	431.7	431.4	......	430.9	432.6	......
11	433.5	432.2	431.8	434.8	431.9	......	430.7	431.6	431.5	430.9	432.4	432.1
12	433.7	......	......	433.8	431.8	432.0	430.7	431.7	431.8	433.9	......	432.1
13	434.2	432.2	431.6	433.8	431.8	431.5	432.0	......	431.6	433.9	432.6	432.0
14	434.0	432.2	431.6	433.0	......	431.3	432.6	431.7	431.6	433.0	432.2	432.0
15	......	432.0	431.7	432.5	431.9	430.7	432.2	431.8	431.6	......	432.2	432.0
16	433.8	432.0	431.7	......	431.7	430.7	......	433.3	431.6	432.0	432.2	432.0
17	433.8	432.0	431.8	432.1	431.6	433.5	431.3	432.1	......	431.9	432.2	......
18	433.8	431.9	431.8	432.1	431.0	......	431.3	430.8	435.6	431.8	432.1	432.1
19	434.0	......	......	431.9	430.4	432.3	431.3	431.5	432.2	435.5	......	432.1
20	433.8	431.9	434.0	432.0	430.4	432.3	431.4	......	432.4	432.5	431.9	432.0
21	433.7	431.9	433.2	434.4	......	431.8	431.4	431.5	432.1	432.6	431.7	432.4
22	......	432.0	433.0	433.2	430.1	432.5	431.4	431.4	431.9	......	431.6	434.7
23	433.2	432.0	432.6	......	431.5	431.8	......	431.4	431.9	432.2	431.8	433.5
24	433.2	432.0	432.7	432.1	430.1	431.5	431.3	431.3	......	432.0	431.8	......
25	433.2	432.0	433.9	432.1	430.1	......	431.3	431.3	431.6	432.0	432.3	432.1
26	433.0	......	436.2	431.9	430.1	433.0	431.3	431.0	431.5	431.9	......	432.0
27	432.9	431.9	435.2	431.9	431.3	432.0	431.3	......	431.5	431.9	431.8	432.0
28	432.8	431.9	435.2	431.7	......	432.0	430.9	431.1	431.4	431.9	431.8	432.0
29	......	......	435.8	431.3	430.1	431.5	431.1	431.4	431.5	......	434.9	432.5
30	432.8	......	436.7	432.3	430.1	431.3	......	431.4	431.4	431.6	433.3	432.7
31	432.6	......	436.9	......	430.1	......	432.4	431.6	......	431.6	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River, above State Dam at Rome, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	432.3	432.3	431.9	432.1	430.1	430.3	434.0	431.4	429.7	431.4	431.7	432.2
2	432.2	432.1	431.9	432.1	430.1	430.2	431.8	430.9	429.7	431.0	431.3	......
3	432.2	431.9	431.9	432.6	432.0	......	431.8	430.9	429.7	430.8	431.0	431.6
4	432.3	......	435.1	433.6	431.5	430.3	431.9	431.8	429.9	430.4	......	431.7
5	432.5	431.9	432.5	432.6	431.5	430.2	431.8	......	429.8	430.2	430.8	431.7
6	432.3	431.8	432.2	432.4	......	430.2	431.8	432.0	429.8	430.4	430.6	431.8
7	......	431.8	432.1	......	430.7	430.2	431.6	431.8	429.8	432.1	430.5	432.0
8	432.1	431.8	432.1	432.6	430.4	430.4	......	431.6	429.8	431.5	430.5	431.8
9	432.0	431.8	432.2	432.7	430.4	432.0	432.0	431.1	429.6	431.3	430.4	......
10	431.9	431.7	432.2	432.6	430.4	......	433.3	431.1	429.6	431.8	430.5	432.6
11	432.0	......	......	433.1	430.5	431.5	433.3	431.2	429.7	431.8	......	432.1
12	432.0	431.9	432.1	433.0	430.4	430.6	431.9	......	429.6	431.7	432.0	432.0
13	431.9	431.9	431.6	433.0	......	430.9	431.8	431.6	429.6	431.5	431.8	432.0
14	......	432.0	431.8	437.1	432.0	430.8	431.5	431.4	429.8	......	431.7	432.0
15	431.9	431.9	431.8	433.1	431.0	430.7	......	431.0	429.7	431.0	431.5	432.1
16	432.1	431.9	431.7	433.0	430.8	431.3	431.3	431.0	......	430.8	431.4	435.1
17	432.2	431.9	431.6	432.6	430.8	......	431.4	430.4	429.7	430.8	431.4	432.6
18	432.1	......	......	432.6	430.7	431.8	431.5	430.3	429.8	430.7	......	432.1
19	432.0	431.9	431.7	432.5	430.7	431.7	431.4	......	429.7	430.6	432.5	431.
20	432.0	431.9	431.7	432.5	......	431.5	431.3	430.2	429.7	435.0	431.6	431.
21	......	432.3	431.7	......	430.7	431.4	431.3	430.2	429.9	......	431.6	432.0
22	433.6	433.7	431.7	431.9	430.6	430.8	......	430.3	430.0	431.4	432.6	431
23	437.6	432.6	431.7	431.8	430.5	430.8	430.9	430.2	431.9	431.3	432.1	......
24	436.4	432.6	431.7	431.8	430.5	431.4	431.2	429.7	430.4	431.3	431.8	431.8
25	433.1	......	431.6	431.9	430.7	431.3	430.9	429.7	430.2	431.4	431.8	431.8
26	432.6	433.1	431.7	431.5	430.5	431.1	431.0	......	430.3	431.5	431.7	431.8
27	432.4	432.3	431.9	430.7	430.1	431.2	430.7	429.8	430.2	431.6	432.6	431.8
28	......	432.0	435.6	......	431.2	430.5	430.9	429.7	430.1	432.8	432.7	431.8
29	431.9	......	433.7	430.1	430.7	430.7	......	429.8	430.1	432.0	432.5	431.9
30	431.9	......	433.1	......	430.6	430.7	431.3	429.7	431.4	431.9	431.9	432.1
31	432.5	......	433.6	......	430.4	......	431.8	429.7	......	431.9	......	432.3

MOHAWK RIVER BELOW DAM AT RIDGE MILLS, N. Y.

***Mean Daily Elevation** of Water-surface (Barge Canal Datum) of **Mohawk River** below Dam at Ridge Mills, N. Y.*

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	......	455.8	455.7	455.7	455.8	456.3	456.1	*
2	......	......	......	......	......	455.8	455.9	455.8	455.7	456.1	456.0	......
3	......	......	......	......	456.5	456.0	455.8	455.9	455.9	456.4	455.9	......
4	......	......	......	......	456.4	455.9	455.8	455.8	456.1	456.5	455.9	......
5	......	......	......	......	456.3	456.0	456.0	455.6	456.2	456.5	455.9	......
6	......	......	......	......	456.4	456.0	456.0	456.1	456.0	456.4	455.9	......
7	......	......	......	......	456.4	456.0	455.8	455.7	455.9	456.2	455.8	......
8	......	......	......	......	456.3	455.4	455.8	455.7	455.6	456.2	455.7	......
9	......	......	......	......	456.2	457.9	455.8	455.7	456.1	456.3	455.7	......
10	......	......	......	......	456.2	456.2	455.8	455.7	455.8	457.2	455.6	......
11	......	......	......	......	466.2	456.1	455.8	455.7	455.7	457.2	455.6	......
12	......	......	......	......	456.2	456.0	455.8	455.6	455.6	457.0	455.7	......
13	......	......	......	......	456.0	455.9	455.9	455.6	455.6	456.7	455.7	......
14	......	......	......	......	455.9	455.9	455.8	455.7	455.7	456.6	455.7	......
15	......	......	......	......	457.0	455.9	455.7	455.7	456.1	456.4	455.7	......
16	......	......	......	......	456.4	456.0	455.7	455.5	455.9	456.2	455.7	......
17	......	......	......	......	455.9	455.9	455.7	455.6	455.6	456.1	455.6	......
18	......	......	......	......	455.7	455.9	456.9	455.5	455.7	456.0	455.6	......
19	......	......	......	......	457.0	455.8	457.0	455.5	455.7	456.0	455.7	......
20	......	......	......	......	456.7	455.8	455.9	459.9	456.7	455.9	455.8	......
21	......	......	......	......	456.2	455.9	455.7	456.1	456.7	458.6	455.8	......
22	......	......	......	......	455.9	455.9	455.6	456.2	456.1	457.4	455.9	......
23	......	......	......	......	455.8	456.0	456.0	457.1	456.0	456.8	455.9	......
24	......	......	......	......	456.0	455.9	455.9	456.9	456.6	456.4	455.8	......
25	......	......	......	......	456.0	455.9	455.7	456.7	456.8	456.2	455.9	......
26	......	......	......	......	456.3	455.9	456.1	456.6	456.2	456.4	455.8	......
27	......	......	......	......	457.6	455.7	455.9	455.7	456.0	456.6	455.8	......
28	......	......	......	......	456.4	455.7	456.0	455.6	455.9	456.4	455.8	......
29	......	......	......	......	456.0	455.9	456.1	455.6	458.5	456.4	455.7	......
30	......	......	......	......	455.9	455.9	455.9	456.0	457.0	456.2	455.7	......
31	......	......	......	......	455.9	......	455.8	456.0	......	456.1	......	......

***Mean Daily Elevation** of Water-surface (Barge Canal Datum) of **Mohawk River** below Dam at Ridge Mills, N. Y.*

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	......	456.4	455.8	456.2	456.1	455.9	456.0	458.8	456.5
2	......	......	......	......	456.2	455.8	457.6	456.0	456.0	455.8	457.5	456.6
3	......	......	......	......	456.3	456.0	456.8	455.9	459.7	456.0	456.7	462.7
4	......	......	......	461.3	456.5	456.0	456.8	455.9	458.6	456.1	457.2	457.7
5	......	......	......	460.9	456.5	456.0	456.8	455.9	456.9	455.9	457.2	456.9
6	......	......	......	459.0	456.4	456.5	456.6	457.4	456.8	455.9	456.9	456.9
7	......	......	......	457.8	457.1	456.8	456.3	456.3	456.5	455.9	458.2	456.6
8	......	......	......	457.3	456.3	456.9	456.1	456.5	456.2	456.0	457.2	456.6
9	......	......	......	457.1	456.4	456.3	456.0	456.5	456.0	456.1	457.4	456.6
10	......	......	......	457.9	456.2	457.3	456.0	456.5	456.3	456.5	456.9	456.5
11	......	......	......	458.9	456.0	457.3	456.0	456.5	455.8	457.3	456.8	456.0
12	......	......	......	458.0	455.9	456.6	456.0	456.4	456.5	458.6	457.2	456.2
13	......	......	......	457.5	455.9	456.3	457.5	456.8	456.0	457.0	456.8	456.3
14	......	......	......	457.2	456.0	456.3	456.1	457.1	455.9	456.5	456.6	456.3
15	......	......	......	456.9	456.0	456.3	456.2	457.1	456.0	456.6	456.6	456.1
16	......	......	......	456.9	455.9	455.9	455.9	457.5	456.0	456.5	456.6	456.4
17	......	......	......	456.5	455.9	458.8	456.2	456.4	456.0	456.5	456.6	456.9
18	......	......	......	456.3	456.1	457.4	456.0	456.1	458.5	456.5	456.6	456.9
19	......	......	......	456.2	456.3	457.0	456.0	456.1	456.5	457.7	456.6	456.6
20	......	......	......	456.5	456.3	456.7	455.9	456.1	458.5	458.0	456.6	456.3
21	......	......	......	460.9	456.1	458.7	455.9	456.0	456.5	456.6	456.1	456.2
22	......	......	......	457.4	456.1	456.5	455.9	456.0	456.4	457.0	456.1	459.5
23	......	......	......	457.0	456.0	456.5	455.8	456.0	456.2	457.0	457.2	457.6
24	......	......	......	456.5	456.0	456.2	455.8	455.9	456.5	457.0	456.1	456.9
25	......	......	......	456.5	456.0	456.1	455.9	455.9	456.5	456.4	456.1	456.2
26	......	......	......	456.5	456.1	457.7	455.9	455.8	456.5	456.2	456.6	456.4
27	......	......	......	456.2	456.0	456.6	455.8	456.1	456.5	456.2	456.6	456.6
28	......	......	......	456.1	455.8	456.6	455.8	456.0	456.5	456.2	457.2	456.1
29	......	......	......	457.5	455.8	456.3	455.9	456.0	456.5	456.2	457.3	456.6
30	......	......	......	456.7	455.8	456.0	457.2	456.0	456.5	456.1	458.1	458.1
31	......	......	......	......	455.7	......	456.5	456.0	......	456.1	......	456.6

* Gage discontinued for winter.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River below Dam at Ridge Mills, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	456.7	456.6	456.3	456.6	455.8	455.5	459.2	455.9	455.6	455.8	456.1	456.6
2	456.7	456.3	456.2	456.5	457.1	455.5	456.3	455.8	455.6	455.7	456.1	455.8
3	456.6	456.5	456.5	456.4	456.4	455.2	456.3	456.0	456.0	455.7	455.9	455.8
4	456.6	456.3	456.7	456.8	456.3	455.5	456.3	456.2	455.7	455.6	455.9	456.2
5	457.3	456.3	456.9	458.0	456.5	455.5	456.4	455.9	455.7	455.7	455.9	456.0
6	456.9	456.3	456.4	456.8	456.4	455.5	456.0	455.8	455.6	455.8	455.9	455.9
7	456.6	456.8	456.2	456.5	455.9	455.8	455.9	457.3	455.6	455.8	455.9	457.2
8	456.5	456.7	456.2	456.5	455.8	455.5	455.9	456.3	455.6	456.1	455.7	456.3
9	456.3	456.7	456.3	456.7	455.8	456.9	455.9	456.0	455.5	455.9	455.7	456.4
10	456.5	456.5	456.6	456.8	456.1	456.0	457.0	455.7	455.6	456.5	455.7	456.1
11	456.8	456.6	456.7	457.1	456.0	456.2	456.8	455.8	455.6	456.1	456.0	456.3
12	456.7	456.8	456.1	457.4	456.0	456.2	456.1	456.1	455.5	456.1	456.5	456.6
13	456.6	456.6	456.1	457.6	455.8	455.8	456.0	455.8	455.6	455.9	456.5	456.6
14	456.4	456.4	456.1	457.9	457.0	455.8	455.8	455.8	455.6	455.9	456.0	456.2
15	456.3	456.4	455.7	462.5	456.6	456.0	455.8	455.8	455.6	455.7	456.0	456.8
16	456.3	456.3	456.1	458.4	455.9	456.0	455.9	455.7	455.6	455.7	456.0	458.0
17	456.4	456.4	455.6	457.4	455.8	456.0	455.9	455.8	455.6	455.7	455.9	457.1
18	456.2	456.4	456.0	457.1	455.8	456.4	455.9	455.8	455.5	455.7	456.1	456.2
19	456.4	456.3	455.7	456.8	455.7	455.8	455.8	455.8	455.5	455.6	457.7	456.2
20	456.1	456.1	455.7	456.7	455.6	455.8	455.9	455.7	455.8	459.5	456.2	456.0
21	456.3	456.5	455.8	456.4	455.6	456.0	455.9	455.7	455.8	456.6	456.2	455.9
22	458.4	457.9	455.7	456.3	455.6	456.0	455.9	455.7	455.9	456.1	456.8	455.9
23	462.4	457.0	455.6	456.1	455.6	455.9	455.8	455.7	456.5	456.0	456.4	455.9
24	461.1	457.8	455.7	456.0	455.5	456.0	455.9	455.8	456.1	456.0	456.2	455.9
25	457.4	457.8	455.9	456.0	455.5	456.0	455.9	455.8	455.7	455.9	456.1	456.0
26	456.9	457.5	455.8	456.0	455.5	455.9	455.8	455.8	455.7	456.0	456.2	456.0
27	456.7	456.8	456.1	455.9	455.8	455.9	455.6	456.0	455.6	455.9	457.0	455.7
28	456.6	456.1	459.8	455.8	455.8	455.9	455.8	455.9	455.5	457.0	457.0	455.8
29	456.3	......	457.5	455.8	455.8	455.7	455.9	455.8	455.7	456.2	456.7	455.7
30	456.6	......	457.4	455.8	455.6	455.9	456.0	455.6	456.1	456.3	456.4	455.6
31	456.7	......	458.1	......	455.6	......	456.4	455.6	......	456.3	......	456.2

MOHAWK RIVER ABOVE DAM AT RIDGE MILLS, N. Y.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River above Dam at Ridge Mills, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	......	*	466.2	466.0	466.0	466.5	466.4	†
2	......	......	......	......	......	......	466.3	466.1	465.9	466.3	466.3	......
3	......	......	......	......	466.5	......	466.3	466.2	466.1	466.4	466.2	......
4	......	......	......	......	466.4	......	466.3	466.1	466.3	466.5	466.1	......
5	......	......	......	......	466.1	......	466.4	465.9	466.5	466.4	466.1	......
6	......	......	......	......	466.0	......	466.4	466.4	466.4	466.3	466.1	......
7	......	......	......	......	466.2	......	466.2	466.0	466.2	466.2	466.1	......
8	......	......	......	......	466.3	......	466.2	466.0	465.9	466.2	466.0	......
9	......	......	......	......	466.2	......	466.2	466.0	466.3	466.3	466.0	......
10	......	......	......	......	466.0	......	466.2	466.0	466.4	467.4	465.8	......
11	......	......	......	......	466.1	......	466.2	466.0	466.2	467.4	465.8	......
12	......	......	......	......	466.0	......	466.2	465.9	466.1	467.1	466.0	......
13	......	......	......	......	465.9	......	466.3	465.9	466.1	466.9	466.0	......
14	......	......	......	......	465.8	466.3	466.2	466.0	466.2	466.6	466.0	......
15	......	......	......	......	466.3	466.4	466.1	465.9	466.4	466.5	466.0	......
16	......	......	......	......	466.5	466.4	466.1	465.8	466.3	466.4	466.0	......
17	......	......	......	......	466.1	466.2	466.0	465.9	465.9	466.3	465.9	......
18	......	......	......	......	466.1	466.3	467.1	465.8	466.0	466.3	465.9	......
19	......	......	......	......	467.0	466.2	467.3	465.8	466.0	466.2	466.0	......
20	......	......	......	......	*	466.1	466.2	466.0	466.6	466.0	466.0	......
21	......	......	......	......	......	466.2	466.1	466.1	466.8	468.6	466.1	......
22	......	......	......	......	......	466.2	466.1	466.4	466.2	467.4	466.1	......
23	......	......	......	......	......	466.3	466.3	466.9	466.0	466.8	466.1	......
24	......	......	......	......	......	466.2	466.3	466.6	466.6	466.4	466.1	......
25	......	......	......	......	......	466.2	466.1	466.4	467.0	466.3	466.1	......
26	......	......	......	......	......	466.2	466.4	466.4	466.4	466.4	466.0	......
27	......	......	......	......	......	466.1	466.3	466.2	466.2	466.8	466.0	......
28	......	......	......	......	......	466.1	466.3	466.1	466.1	466.6	466.0	......
29	......	......	......	......	......	466.2	466.4	466.1	468.6	466.6	465.9	......
30	......	......	......	......	......	466.2	466.2	466.2	467.6	466.5	465.9	......
31	......	......	......	......	......	......	466.1	466.1	......	466.4	......	......

* Gage out of use. † Gage discontinued for winter.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River above Dam at Ridge Mills, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	468.6	466.4	465.6	466.4	466.2	466.0	466.1	467.6	466.6
2	......	......	......	467.9	466.3	465.6	467.7	466.1	466.1	465.7	467.3	466.6
3	......	......	......	467.9	466.4	466.1	466.9	466.0	468.1	466.1	466.6	469.6
4	......	......	......	468.9	466.5	466.1	466.9	466.0	467.8	466.1	466.9	467.7
5	......	......	......	468.9	466.5	466.2	466.9	466.0	466.7	466.0	466.9	466.9
6	......	......	......	467.9	466.5	466.5	466.6	467.0	466.6	466.9	466.7	466.7
7	......	......	......	467.4	467.0	466.0	466.5	466.4	466.4	465.9	467.5	466.5
8	......	......	......	467.1	466.4	466.0	466.3	465.5	466.2	466.1	466.8	466.5
9	......	......	......	466.9	466.5	467.0	466.2	465.5	466.1	466.1	467.0	466.5
10	......	......	......	467.4	466.3	466.3	466.2	465.5	466.3	466.6	466.7	466.6
11	......	......	......	468.4	466.1	467.3	466.2	465.5	466.6	467.1	466.7	466.1
12	......	......	......	467.4	466.0	466.6	466.2	465.4	466.5	467.6	466.9	466.3
13	......	......	......	467.3	466.0	466.4	467.4	466.6	466.1	467.1	466.6	466.4
14	......	......	......	467.0	466.1	466.4	466.0	467.1	466.1	466.6	466.5	466.3
15	......	......	......	466.7	466.1	466.4	466.3	467.1	466.1	466.6	466.5	465.9
16	......	......	......	466.7	466.0	466.0	466.1	467.1	466.1	466.1	466.5	466.2
17	......	......	......	466.4	466.0	467.8	466.3	466.5	466.1	466.3	466.5	466.2
18	......	......	......	466.6	466.3	466.6	466.1	466.2	467.5	466.3	466.5	466.2
19	......	......	......	466.2	466.3	466.4	466.1	466.2	466.6	467.6	466.5	466.4
20	......	......	......	466.5	466.3	466.7	466.0	466.2	467.6	468.3	466.5	456.4
21	......	......	......	468.6	466.2	468.2	466.0	466.1	466.6	466.6	466.2	466.2
22	......	......	......	467.2	466.2	466.7	466.0	466.1	466.4	466.2	466.2	468.0
23	......	......	......	466.8	466.1	466.7	465.9	466.1	466.3	466.2	466.8	467.0
24	......	......	......	466.6	466.2	466.4	465.9	466.0	465.6	466.2	466.2	466.7
25	......	......	......	466.6	466.3	466.4	466.0	466.0	465.5	466.4	466.2	466.3
26	......	......	......	466.6	466.3	467.6	466.0	465.9	465.5	466.3	466.5	466.4
27	......	......	......	466.3	466.2	466.7	465.9	466.2	465.5	466.3	467.5	466.5
28	......	......	468.3	466.2	466.0	466.7	465.9	466.1	465.5	466.3	467.3	466.5
29	......	......	469.5	467.3	466.0	466.5	466.0	466.1	465.5	466.3	466.9	466.5
30	......	......	469.5	466.7	466.0	466.3	466.8	466.1	465.5	466.2	467.5	467.4
31	......	......	468.8	......	465.6	......	466.6	466.1	......	466.2	......	466.7

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River above Dam at Ridge Mills, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	466.6	466.5	466.2	466.6	465.9	465.3	467.9	466.0	465.6	465.9	466.1	466.5
2	466.5	466.1	466.0	466.5	466.8	465.1	466.3	466.0	465.6	465.8	466.1	466.0
3	466.4	466.0	465.9	466.4	466.4	465.4	466.3	466.1	466.1	465.8	466.0	465.9
4	466.4	466.1	467.6	466.6	466.3	465.6	466.4	466.1	465.8	465.6	466.0	464.5
5	466.8	466.1	466.6	467.3	466.5	465.3	466.4	466.0	465.8	465.7	466.0	466.5
6	466.6	466.0	466.3	466.6	466.5	465.1	466.1	465.9	465.7	465.8	466.0	465.9
7	466.6	466.1	466.6	466.4	466.0	465.9	466.0	466.9	465.7	466.6	466.0	466.5
8	466.6	466.1	466.2	466.5	465.9	465.1	466.0	466.3	465.6	466.2	465.9	466.0
9	466.0	466.6	466.2	466.6	465.9	466.7	466.0	466.1	465.4	465.9	465.8	466.2
10	466.1	466.5	466.5	466.8	466.2	466.2	466.7	465.9	465.5	466.4	465.9	466.2
11	466.3	466.3	466.5	466.8	466.1	466.3	466.6	466.0	465.1	466.2	466.1	466.2
12	466.4	466.3	466.1	467.0	466.1	466.2	466.2	466.2	464.9	466.2	466.6	466.0
13	466.3	466.6	466.0	467.1	465.8	466.1	466.1	465.9	465.6	466.0	466.3	466.5
14	466.2	466.4	465.9	467.2	466.7	466.1	465.9	465.9	465.7	466.0	466.1	466.3
15	466.1	466.2	465.6	469.6	466.6	466.1	465.9	465.9	465.7	465.8	466.1	466.6
16	466.1	465.9	466.2	467.5	466.0	466.1	466.0	465.8	465.7	465.8	466.1	467.3
17	466.5	466.2	466.0	467.0	465.9	466.0	466.0	465.9	465.5	465.8	466.0	466.6
18	466.2	466.3	465.6	466.8	465.9	466.3	466.0	465.8	465.4	465.8	466.2	467.3
19	466.3	466.3	465.6	466.6	465.8	466.0	465.9	465.8	465.1	465.6	467.1	466.6
20	466.1	466.1	465.2	466.6	465.8	466.0	465.9	465.8	465.9	468.1	466.3	465.9
21	466.4	466.6	465.7	466.4	465.7	466.1	465.9	465.8	465.9	466.6	466.3	466.0
22	467.4	467.1	465.7	466.3	465.7	466.1	465.8	465.7	466.0	466.2	466.6	466.0
23	469.[illegible]	466.7	465.2	466.2	465.7	465.9	465.8	465.7	466.5	466.1	466.4	465.9
24	468.6	467.5	465.3	466.0	465.6	466.1	466.0	465.8	466.0	466.1	466.3	466.0
25	467.1	467.5	465.7	466.0	465.6	466.1	466.0	465.7	465.9	466.0	466.2	465.9
26	466.8	467.5	465.8	465.9	465.6	465.9	465.9	465.9	465.9	466.1	466.3	465.9
27	466.7	466.7	466.1	465.9	465.9	465.9	465.6	466.1	465.8	466.1	466.8	465.8
28	466.6	466.8	468.2	465.8	465.9	465.9	465.9	465.7	465.6	466.8	466.9	465.9
29	466.4	......	467.1	465.8	465.9	465.8	466.0	465.8	465.7	466.3	466.6	465.8
30	466.4	......	467.0	465.9	465.7	466.0	466.1	465.7	466.1	466.3	466.4	465.8
31	466.6	......	467.4	......	465.6	......	466.3	465.6	......	466.3	......	466.3

MOHAWK RIVER AT HIGHWAY BRIDGE, NEAR DELTA, ONEIDA COUNTY, N. Y.

A current-meter gaging station was established at the highway bridge over the Mohawk river just below Lock No. 7, Black River canal, and about two miles below Delta, August 20, 1905, by C. A. Poole. The gage is a vertical board, graduated to feet and tenths, and is secured to the south wing of the east abutment of bridge with its zero at elevation 479.0, Barge canal datum. Observations of the stage of the stream are taken each morning and evening by Fred Miller.

During ordinary stages of the river, discharge measurements have been made from the bridge, which consist of one span of 101.6 feet. In low water the measurements are made by fording the stream about 1,000 feet above the bridge, where there is a straight channel of uniform cross-section. The channel at the bridge is of gravel and of uniform section directly under the bridge, but there is a small island about 150 feet up-stream, which affects the flow during the low stages.

This station is located within 1,000 feet of the site of the proposed dam for the Delta reservoir and the drainage area is practically the same, as at the dam site.

The yield of the watershed above this point is influenced considerably by the Black River canal, which receives its initial supply from the Black river watershed and an additional supply from the Mohawk river at Delta. The diversion at Delta is in some measure counterbalanced by the water which returns to the river from seepage through the canal banks and flow over waste-weirs.

Current-meter measurements of the flow in the Black River canal were made during the year 1905, by C. A. Poole, at the farm bridge about one mile south of Boonville, where the total flow diverted from the Black river watershed to the Mohawk river can be measured. Measurements have also been taken of the flow in the canal, opposite the river gaging station, from the highway bridge below Lock No. 7. The results of these gagings are given in the accompanying tables. No attempt has been made to obtain a continuous record of the flow in the canal.

Current Meter Discharge Measurements on the Black River Canal, at the Highway Bridge below Lock No. 7.

DATE.	Width.	Area of section.	Mean velocity.	Elevation of water-surface.	Discharge.
1905.	*Feet.*	*Square feet.*	*Ft. per sec'd.*	*Feet.*	*Second-feet.*
Aug. 17	41.7	145	0.94	488.22	136
Aug. 18	41.7	149	0.79	488.32	117
Sept. 7	41.7	153	1.03	488.40	158
Sept. 22	41.7	148	0.97	488.29	143
Nov. 8	41.7	148	0.89	488.30	131

Current Meter Discharge Measurements on the Black River Canal, below Boonville, N. Y

DATE.	Width.	Area of section.	Mean velocity.	Below dock stick.	Elevation of water surface.	Discharge.
1905.	*Feet.*	*Square feet.*	*Ft. per sec'nd.*	*Feet.*		*Second-feet.*
Aug. 19	40.4	175	1.18	1.75	....	206
Aug. 19	40.4	177	0.99	1.70	....	175
Sept. 1	40.4	179	1.10	1.65	....	197
Nov. 15	40.4	185	1.18	1.50	....	218

The drainage basin of Mohawk river above Delta is shown on the Boonville and Taberg sheets of the U. S. Geological Survey topographic map. From which the following data has been deduced:

Drainage Areas of Mohawk River Basin above Delta.

NAME OF STREAM.	AREA IN SQUARE MILES.	
	Place to place.	Total.
West Branch, Mohawk river	18.5	18.5
East branch, Mohawk river	15.1	33.6
Junction of East and West branches of Lansingkill	14.5	48.1
Lansingkill	28.0	76.1
Stringer brook	14.6	90.7
Big brook	19.2	109.9
Big brook to Delta dam site	27.3	137.2
Delta dam site to State dam, Rome	10.8	148.0

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River, below Lock No. 7, Black River Canal.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	......	......	......	......	......	480.1	480.2	482.2	480.9
2	......	......	......	......	......	......	......	......	480.1	480.0	481.2	480.6
3	......	......	......	......	......	......	......	......	484.4	480.7	480.8	485.0
4	......	......	......	......	......	......	......	......	482.8	480.4	481.7	481.4
5	......	......	......	......	......	......	......	......	481.3	480.2	481.2	481.2
6	......	......	......	......	......	......	......	......	481.2	480.2	482.7	481.0
7	......	......	......	......	......	......	......	......	481.2	480.2	481.6	480.8
8	......	......	......	......	......	......	......	......	480.6	480.2	482.0	480.8
9	......	......	......	......	......	......	......	......	480.4	480.0	481.4	480.9
10	......	......	......	......	......	......	......	......	480.4	480.1	481.2	480.8
11	......	......	......	......	......	......	......	......	480.3	480.2	481.0	480.6
12	......	......	......	......	......	......	......	......	480.8	482.7	481.2	480.5
13	......	......	......	......	......	......	......	......	480.5	482.4	481.8	480.5
14	......	......	......	......	......	......	......	......	480.4	481.5	481.0	480.4
15	......	......	......	......	......	......	......	......	480.2	481.6	480.8	480.2
16	......	......	......	......	......	......	......	......	480.3	481.5	480.8	480.2
17	......	......	......	......	......	......	......	......	480.3	480.6	480.8	480.3
18	......	......	......	......	......	......	......	......	483.6	480.4	480.8	480.4
19	......	......	......	......	......	......	......	......	481.0	483.2	480.8	480.4
20	......	......	......	......	......	......	......	480.2	481.6	482.0	480.6	480.4
21	......	......	......	......	......	......	......	480.2	481.1	481.4	480.4	481.4
22	......	......	......	......	......	......	......	480.1	480.7	481.0	480.5	482.9
23	......	......	......	......	......	......	......	480.1	480.6	481.0	480.4	481.5
24	......	......	......	......	......	......	......	480.0	480.4	480.8	480.6	481.0
25	......	......	......	......	......	......	......	480.0	480.2	480.6	481.1	480.8
26	......	......	......	......	......	......	......	480.0	480.3	480.5	480.7	480.7
27	......	......	......	......	......	......	......	480.0	480.3	480.4	480.8	480.6
28	......	......	......	......	......	......	......	480.0	480.2	480.4	480.5	480.3
29	......	......	......	......	......	......	......	480.1	480.2	480.4	483.8	481.9
30	......	......	......	......	......	......	......	480.4	480.4	480.4	481.7	481.6
31	......	......	......	......	......	......	......	480.2	......	480.5	......	481.0

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River, below Lock No. 7, Black River Canal.

DAY.	Jan	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	481.0	480.8	480.4	481.2	480.0	479.7	482.1	480.0	479.8	480.0	480.2	480.9
2	480.8	480.2	480.4	480.8	480.0	479.6	480.6	480.0	479.8	479.9	480.2	480.8
3	480.7	480.1	480.2	480.8	481.2	479.6	480.4	480.0	479.9	479.8	480.0	479.8
4	480.8	480.2	482.2	481.3	480.4	479.5	480.6	480.6	479.8	479.9	480.2	479.6
5	481.4	480.4	481.0	481.6	480.7	479.6	480.4	480.2	479.8	479.8	480.0	479.8
6	481.0	480.2	480.8	481.0	480.2	479.6	480.2	480.3	479.8	480.0	480.0	480.0
7	480.7	480.4	480.6	480.8	480.0	479.8	480.2	481.1	479.8	480.8	479.9	480.6
8	480.6	480.3	480.4	480.7	480.0	480.1	480.6	480.5	479.8	480.2	479.8	480.0
9	480.5	480.2	480.4	480.9	480.0	480.8	483.0	480.2	479.7	480.0	479.8	480.0
10	480.4	480.2	480.7	480.7	480.0	480.4	481.4	479.9	479.8	480.6	480.0	479.9
11	480.6	480.2	480.4	481.4	480.4	480.4	480.8	480.0	479.7	480.4	480.2	480.0
12	480.4	480.4	480.3	481.8	480.0	479.9	480.4	480.2	479.7	480.3	480.6	479.8
13	480.4	480.2	480.2	481.8	480.4	480.0	480.4	480.1	479.8	480.0	480.3	479.8
14	480.4	480.2	480.1	482.1	480.5	480.0	480.0	480.0	479.8	480.0	480.3	479.8
15	480.4	480.2	479.8	485.0	480.2	479.9	480.0	479.9	479.8	479.9	480.1	481.5
16	480.4	480.1	479.9	482.0	480.0	480.2	480.0	480.0	479.8	479.9	480.2	481.8
17	480.6	480.0	479.8	481.3	479.9	480.5	480.1	479.9	479.8	479.9	480.0	481.0
18	480.4	480.2	479.8	481.1	479.9	480.4	480.2	479.9	479.8	479.9	481.4	480.4
19	480.4	480.1	479.8	481.0	479.8	480.2	480.0	479.8	479.8	479.8	481.4	480.1
20	480.4	480.1	479.9	480.8	479.8	480.1	480.0	479.8	479.8	482.3	480.6	480.0
21	480.8	480.2	479.8	480.6	479.7	480.0	480.0	479.9	479.9	480.6	480.6	480.0
22	483.2	481.7	479.8	480.8	479.7	480.0	480.0	480.0	480.2	480.2	480.8	480.0
23	486.2	481.2	479.8	480.4	479.7	480.1	479.9	479.8	480.3	480.2	480.6	480.4
24	483.8	481.2	479.8	480.2	479.8	480.2	479.9	479.8	479.8	480.1	480.4	479.8
25	481.6	481.8	479.7	480.0	479.8	480.0	479.9	479.9	479.8	480.1	480.4	480.0
26	481.2	481.6	479.8	480.0	479.7	480.0	480.2	479.8	479.8	480.2	480.8	479.8
27	481.0	480.8	483.0	480.0	480.4	480.0	479.7	479.8	479.8	480.2	481.4	479.8
28	480.8	480.4	483.1	480.0	480.2	480.0	479.8	479.8	479.6	481.0	481.2	479.8
29	480.4	......	481.6	480.0	479.9	480.0	480.4	479.8	479.8	480.4	481.0	479.8
30	480.5	......	481.8	480.0	479.8	480.2	480.8	479.8	480.4	480.5	480.8	479.8
31	480.8	......	481.8	......	479.7	......	480.6	479.8	......	480.4	......	482.0

Current Meter Discharge Measurements of Mohawk River near Lock No. 7, Black River Canal, below Delta, N. Y.

DATE.	Hydrographer.	Gage height.	Width.	Area of section.	Mean velocity.	Discharge.
		Feet.	*Feet.*	*Square feet.*	*Ft. per second.*	*Second-feet.*
1905.						
Aug. 8	C. A. Poole.......	1.3	99.6	281	0.89	250
Aug. 17	C. A. Poole.......	1.9	99.8	341	1.52	520
Sept. 7	C. A. Poole......	2.0	99.8	351	1.66	582
Sept. 22	C. A. Poole.......	1.6	99.7	311	1.41	440
Nov. 8	C. A. Poole......	2.8	100.2	431	2.27	978
Dec. 4	C. A. Poole.......	2.7	100.2	421	2.14	902
1906.						
Mar. 30	C. A. Poole.......	2.85	98.6	425.2	2.62	1,114
Mar. 30	C. A. Poole......	3.2	98.6	464.7	2.89	1,343
Mar. 31	C. A. Poole	2.68	98.6	405.5	2.45	994
April 1	C. A. Poole......	1.90	98.6	337.3	1.56	527
April 1	C. A. Poole......	2.45	98.6	376.2	2.28	854
Sept. 20	E. F. Weeks......	0.80	83	97.9	1.53	*150

Current Meter Discharge Measurements of Black River Canal, just below Lock No. 7, at Highway Bridge, below Delta, N. Y.

DATE.	Hydrographer.	Gage height.	Elevation of water-surface.	Width.	Area of section.	Mean velocity.	Discharge.
		Feet.		*Feet.*	*Square feet.*	*Ft. per second*	*Second feet.*
1905.							
Aug. 17	C. A. Poole	......	488.22	41.7	145	0.94	136
Aug. 18	C. A. Poole........	......	488.32	41.7	149	0.79	117
Sept. 7	C. A. Poole........	......	488.40	41.7	153	1.03	158
Sept. 22	C. A. Poole........	......	488.29	41.7	148	0.97	143
Nov. 8	C. A. Poole........	......	488.30	41.7	148	0.89	131
1906.							
Sept. 20	E. F. Weeks........	3.47	......	41.5	163.65	0.82	133

MOHAWK RIVER BELOW AND ABOVE DAM AT DELTA, N. Y.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River, below Delta Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	503.2	503.1	......	......	502.5	502.2	506.0	502.6	502.4	502.5	502.8	503.3
2	502.9	502.8	......	......	502.4	502.3	503.0	502.6	502.4	502.4	502.7	502.6
3	502.9	502.8	......	......	503.5	502.4	502.8	502.5	502.5	502.5	502.7	......
4	503.1	......	504.9	......	503.0	502.3	503.4	503.2	502.5	502.5	502.6	......
5	503.8	......	503.3	......	503.3	502.3	503.0	502.6	502.5	502.7	502.6	......
6	503.3	......	503.1	......	502.8	502.4	502.7	502.5	502.5	502.7	502.6	......
7	......	......	503.0	......	502.6	502.5	502.6	503.7	502.5	503.4	502.5	......
8	503.0	......	503.0	......	502.5	502.4	502.6	502.9	502.4	502.7	502.5	......
9	503.0	......	502.9	......	502.9	503.5	502.8	502.7	502.5	502.6	502.5	......
10	502.9	......	503.2	......	502.9	502.6	503.5	502.4	502.4	503.0	502.6	......
11	502.9	......	502.9	......	502.6	502.8	503.3	502.5	502.4	502.9	502.6	......
12	502.8	......	502.8	......	502.5	502.4	502.8	502.6	502.3	502.7	503.1	......
13	502.8	......	502.8	......	502.5	502.4	502.9	502.5	502.3	502.6	502.9	......
14	......	......	502.7	......	503.8	502.4	502.5	502.5	502.4	502.6	502.7	......

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*Measurement made by wading 800 feet up-stream from regular section.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River, below Delta Dam—Concluded.

DAY.	Jan	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
15	......		502.6	......	502.8	502.3	502.6	502.4	502.5	502.6	502.6	......
16	......		502.6	......	502.6	502.7	502.5	502.5	502.4	502.6	502.6	504.3
17	......		502.6	......	502.5	502.5	502.7	502.5	502.4	502.4	502.5	503.3
18	......		502.5	......	502.5	502.9	502.5	502.5	502.4	502.4	502.9	502.7
19	......		502.4	......	502.4	502.6	502.6	502.5	502.4	502.5	504.1	502.5
20	......		502.5	......	502.4	502.5	502.6	502.4	502.4	500.2	503.2	......
21	......	504.5	502.6	......	502.4	502.5	502.6	502.5	502.5	503.1	502.9	......
22	505.5	504.3	502.5	......	502.4	502.5	502.5	502.6	502.5	502.7	503.4	......
23	508.8	504.1	502.5	......	502.3	502.5	502.5	502.6	502.9	502.9	503.0	......
24	506.1	503.7	502.4	502.7	502.3	502.6	502.5	502.5	502.4	502.7	502.9	......
25	503.9	503.8	502.4	502.7	502.2	502.5	502.5	502.5	502.4	502.7	502.8	......
26	503.7	504.3	502.5	502.6	502.3	502.4	502.4	502.5	502.4	502.8	502.9	......
27	503.3	503.3	505.1	502.6	502.6	502.4	502.4	502.4	502.5	502.7	503.5	......
28	......		......	502.5	502.9	502.5	502.4	502.5	502.4	503.4	503.6	......
29	502.9		......	502.6	502.5	502.4	502.4	502.5	502.4	503.2	503.8	......
30	503.0		......	502.6	502.4	502.7	502.9	502.5	502.8	503.0	503.1	......
31	503.2		......	......	502.3	......	502.9	502.5	......	502.9	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River, above Delta Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	509.6	509.6	509.4	509.6	509.2	509.0	510.6	509.3	509.1	509.3	509.4	509.6
2	509.4	509.3	509.3	509.4	509.1	509.1	509.5	509.3	509.0	509.2	509.3	509.2
3	509.4	509.3	509.3	509.4	509.8	509.1	509.4	509.3	509.1	509.1	509.3	509.3
4	509.6	509.3	510.2	509.6	509.5	509.0	509.7	509.6	509.2	509.1	509.3	509.1
5	509.8	509.3	509.6	509.5	509.6	509.0	509.5	509.6	509.2	509.2	509.2	509.2
6	509.6	509.4	509.6	509.6	509.4	509.2	509.3	509.2	509.1	509.2	509.3	509.3
7	......	509.4	509.5	509.5	509.3	509.3	509.2	509.8	509.0	509.6	509.2	509.5
8	509.3	509.4	509.4	509.6	509.2	509.2	509.3	509.5	509.0	509.4	509.2	509.3
9	509.4	509.4	509.4	509.6	509.5	509.7	509.3	509.4	509.0	509.3	509.1	509.3
10	509.4	509.3	509.6	509.5	509.5	509.3	509.7	509.2	509.0	509.5	509.3	509.3
11	509.5	509.3	509.4	509.7	509.4	509.4	509.6	509.3	509.0	509.4	509.3	509.2
12	509.5	509.3	509.3	509.9	509.2	509.2	509.4	509.3	508.9	509.3	509.5	509.1
13	509.5	509.3	509.4	509.8	509.3	509.2	509.4	509.3	509.0	509.3	509.4	509.2
14	509.3	509.3	509.2	510.0	509.8	509.2	509.2	509.3	509.2	509.2	509.4	509.2
15	509.5	509.2	509.1	511.6	509.4	509.1	509.3	509.2	509.1	509.2	509.3	510.1
16	509.5	509.2	509.1	510.1	509.3	509.4	509.2	509.3	509.1	509.2	509.3	510.0
17	509.6	509.2	509.2	509.9	509.2	509.3	509.3	509.2	509.1	509.1	509.3	509.6
18	509.4	509.2	509.1	509.6	509.2	509.5	509.2	509.2	509.1	509.0	509.4	509.4
19	509.5	509.2	509.0	509.6	509.2	509.3	509.3	509.2	509.1	509.1	509.9	509.2
20	509.4	509.3	509.1	509.6	509.2	509.3	509.3	509.1	509.1	510.6	509.6	509.2
21	......	509.9	509.1	509.5	509.1	509.2	509.3	509.2	509.1	509.5	509.5	509.3
22	510.4	509.9	509.1	509.5	509.1	509.2	509.2	509.3	509.2	509.4	509.7	509.3
23	511.5	509.6	509.1	509.4	509.0	509.2	509.2	509.3	509.5	509.5	509.5	509.2
24	510.6	509.7	509.0	509.3	509.1	509.3	509.2	509.2	509.2	509.3	509.4	509.1
25	510.0	509.8	509.0	509.3	509.0	509.2	509.2	509.2	509.1	509.3	509.4	509.1
26	509.8	510.1	509.0	509.2	509.1	509.2	509.1	509.1	509.1	509.4	509.5	509.1
27	509.5	509.6	510.2	509.3	509.3	509.2	509.0	509.1	509.2	509.3	509.7	509.2
28	......	509.3	510.3	509.2	509.4	509.2	509.1	509.1	509.1	509.7	509.7	509.2
29	509.4	......	509.9	509.3	509.3	509.2	509.1	509.1	509.1	509.6	509.5	509.1
30	509.5	......	509.7	509.3	509.2	509.3	509.4	509.1	509.4	509.5	509.5	509.2
31	509.6	....	509.8	....	509.1	......	509.4	509.1	.....	509.4	......	509.6

GAGE READINGS TO DETERMINE THE SURFACE SLOPE OF MOHAWK RIVER.

Table of Water-surface Elevations on Mohawk River, Cohoes Power Co.'s Dam to St. Johnsville.

LOCATION.	JULY 14, 1905.		JULY 21, 1905.		JULY 28, 1905.		AUGUST 2, 1905.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
100 feet west of breakwater. Cohoes Power Co.'s dam					10.30 a.m.	154.50	1.05 p.m.	155.21
Up-stream end, north pier of aqueduct, Crescent					10.45 a.m.	165.13	11.45 a.m.	165.97
West angle, north abutment, Dunsbach Ferry bridge					10.10 a.m.	165.60	11.00 a.m.	166.65
West angle, north abutment, Vischer's Ferry bridge					10.50 a.m.	175.10	10.05 a.m.	176.20
South abutment of toll bridge, Rexford Flats					9.12 a.m.	202.30		203.10
South abutment of dam, Rexford Flats					9.05 a.m.	209.32		209.98
Schenectady Railway Co.'s bridge					9.00 a.m.	209.45		210.35
D. & H. R. R. Co.'s bridge					10.40 a.m.	209.50		210.45
Freeman's bridge					10.45 a.m.	209.50		210.45
N. Y. C. & H. R. R. R. Co.'s bridge					9.00 a.m.	209.60		210.50
Glenville bridge, Schenectady					9.08 a.m.	209.68		210.55
B. & M. R. R. Co.'s bridge					9.00 a.m.	217.50		219.30
W. S. R. R. bridge, Pattersonville					12.00 a.m.	231.50		232.80
							August 5,	1905.
Amsterdam bridge		249.3		249.6		249.2		249.0
Tribes Hill bridge	July 17	268.5		268.6		267.95		268.0
Fultonville bridge		274.5		275.0		273.85		274.5
Canajoharie bridge		286.5		286.9		285.85		285.2
Fort Plain bridge		293.02		293.4		292.00		292.4
St. Johnsville bridge		298.75		299.5		298.50		298.7

Table of Water-surface Elevations on Mohawk River, Cohoes Power Co.'s Dam to St. Johnsville—(Continued).

LOCATION.	AUGUST 9, 1905.		AUGUST 16, 1905.		AUGUST 18, 1905.		AUGUST 25, 1905.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
100 feet west of breakwater, Cohoes Power Co.'s dam	....	155.0	4.30 p.m.	155.70	8.10 a.m.	155.75	8.10 a.m.	154.50
Up-stream end, north pier of aqueduct, Crescent	....	165.5	4.30 p.m.	166.58	10.00 a.m.	166.40	8.40 a.m.	165.15
West angle, north abutment, Dunsbach Ferry bridge	....	166.3	4.15 p.m.	167.53	10.30 a.m.	167.50	9.00 a.m.	165.60
West angle, north abutment, Vischer's Ferry bridge	....	175.7	3.50 p.m.	177.50	11.20 a.m.	177.20	10.00 a.m.	175.00
South abutment of toll bridge, Rexford Flats	....	202.9	8.50 p.m.	204.00	8.42 a.m.	204.50	9.40 a.m.	201.90
South abutment of dam, Rexford Flats	....	209.8	8.55 p.m.	210.50	8.50 a.m.	210.90	9.43 a.m.	209.25
Schenectady Railway Co.'s bridge	....	210.1	9.25 p.m.	211.20	9.00 a.m.	211.60	9.55 a.m.	209.50
D. & H. R. R. Co.'s bridge	....	210.15	9.55 p.m.	211.25	9.21 a.m.	211.65	10.20 a.m.	209.55
Freeman's bridge	....	210.2	10.01 p.m.	211.30	9.26 a.m.	211.70	10.25 a.m.	209.60
N. Y. C. & H. R. R. R. Co.'s bridge	....	210.2	10.30 p.m.	211.35	9.45 a.m.	211.75	10.40 a.m.	209.65
Glenville bridge, Schenectady	....	210.21	11.20 p.m.	211.71	10.20 a.m.	211.80	10.55 a.m.	209.69
B. & M. R. R. Co.'s bridge	....	218.3	12.01 p.m.	222.50	11.01 a.m.	221.50	1.09 a.m.	217.40
W. S. R. R. bridge, Pattersonville	....	232.2	1.35 p.m.	236.00	11.50 a.m.	234.70	12.20 a.m.	231.45
	August 11,	1905.						
Amsterdam bridge	....	249.4	....	....	....	251.0	....	249.10
Tribes Hill bridge	....	268.0	....	....	....	270.2	....	267.9
Fultonville bridge	....	274.7	....	....	....	277.0	....	274.1
Canajoharie bridge	....	285.4	....	....	....	288.2	....	285.3
Fort Plain bridge	....	292.2	....	....	....	294.6	....	292.0
St. Johnsville bridge	....	298.7	....	....	....	301.0	....	298.5

Table of Water-surface Elevations on ***Mohawk River, Cohoes Power Co.'s Dam to St. Johnsville***—(Continued).

LOCATION.	SEPTEMBER 1, 1905.		SEPTEMBER 5, 1905.		SEPTEMBER 8, 1905.		SEPTEMBER 15, 1905.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
100 feet west of breakwater, Cohoes Power Co.'s dam	8.00 a.m.	155.10	....	....	7.45 a.m.	156.5	7.45 a.m.	155.2
Up-stream end, north pier of aqueduct, Crescent	8.30 a.m.	165.40	....	....	8.10 a.m.	167.0	8.15 a.m.	165.9
West angle, north abutment, Dunsbach Ferry bridge	9.00 a.m.	166.20	....	....	9.15 a.m.	168.3	8.50 a.m.	166.6
West angle, north abutment, Vischer's Ferry bridge	10.00 a.m.	175.70	....	....	10.15 a.m.	178.2	9.15 a.m.	176.2
South abutment of toll bridge, Rexford Flats	10.28 a.m.	203.00	10.42 a.m.	210.0	9.22 a.m.	205.3	6.33 p.m.	203.5
South abutment of dam, Rexford Flats	10.32 a.m.	209.90	10.37 a.m.	213.8	9.17 a.m.	211.2	6.35 p.m.	210.2
Schenectady Railway Co.'s bridge	10.23 a.m.	210.25	10.24 a.m.	214.8	9.07 a.m.	212.0	6.45 p.m.	210.5
D. & H. R. R. Co.'s bridge	9.53 a.m.	210.30	9.52 a.m.	215.7	8.50 a.m.	212.2	7.07 p.m.	210.55
Freeman's bridge	9.50 a.m.	210.35	9.46 a.m.	216.0	8.45 a.m.	212.3	7.12 p.m.	210.6
N. Y. C. & H. R. R. R. Co.'s bridge	9.30 a.m.	210.40	9.27 a.m.	216.4	8.25 a.m.	212.5	7.25 p.m.	210.65
Glenville bridge, Schenectady	9.23 a.m.	210.46	5.33 p.m.	217.56	8.15 a.m.	212.61	7.35 p.m.	210.71
B. & M. R. R. Co.'s bridge	1.18 p.m.	219.00	1.10 p.m.	229.0	11.36 a.m.	222.9	7.40 p.m.	219.7
W. S. R. R. bridge, Pattersonville	12.27 p.m.	232.84	12.22 p.m.	240.0	12.30 a.m.	236.8	9.00 a.m.	233.0
Amsterdam bridge	....	250.0	....	257.0	....	251.7	....	250.5
Tribes Hill bridge	....	268.7	....	274.3	....	270.7	....	268.8
Fultonville bridge	....	276.1	....	284.0	....	277.8	....	275.5
Canajoharie bridge	....	286.6	....	297.5	....	290.0	....	286.8
Fort Plain bridge	....	293.4	....	302.8	....	296.2	....	293.4
St. Johnsville bridge	....	299.6	....	310.1	....	302.6	....	299.7

Table of Water-surface Elevations on Mohawk River, Cohoes Power Co.'s Dam to St. Johnsville—(Continued).

LOCATION.	SEPTEMBER 22, 1905.		SEPTEMBER 29, 1905.		OCTOBER 6, 1905.		OCTOBER 13, 1905.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
100 feet west of breakwater, Cohoes Power Co.'s dam	8.10 a.m.	156.0	8.00 a.m.	154.7	8.10 a.m.	154.85	11.50 a.m.	155.8
Up-stream end, north pier of aqueduct, Crescent	8.35 a.m.	166.8	8.25 a.m.	165.5	8.35 a.m.	165.40	12.15 p.m.	166.7
West angle, north abutment, Dunsbach Ferry bridge	9.05 a.m.	167.7	8.50 a.m.	166.0	9.00 a.m.	166.12	12.45 p.m.	167.75
West angle, north abutment, Vischer's Ferry bridge	10.15 a.m.	177.5	9.50 a.m.	175.4	10.00 a.m.	175.4	3.00 p.m.	177.5
South abutment of toll bridge, Rexford Flats	10.59 a.m.	205.8	1.57 p.m.	202.6	9.53 a.m.	202.8	9.35 a.m.	204.9
South abutment of dam, Rexford Flats	10.55 a.m.	211.0	1.52 p.m.	209.55	9.48 a.m.	209.65	9.32 a.m.	211.0
Schenectady Railway Co.'s bridge	10.37 a.m.	211.65	1.42 p.m.	209.75	9.41 a.m.	209.75	9.23 a.m.	211.8
D. & H. R. R. Co.'s bridge	10.18 a.m.	211.7	1.23 p.m.	209.8	9.14 a.m.	209.8	8.53 a.m.	211.85
Freeman's bridge	10.14 a.m.	211.75	1.17 p.m.	209.85	9.10 a.m.	209.85	8.15 a.m.	211.9
N. Y. C. & H. R. R. R. Co.'s bridge	9.55 a.m.	211.8	12.59 p.m.	209.9	8.50 a.m.	209.9	8.30 a.m.	212.0
Glenville bridge, Schenectady	9.46 a.m.	211.8	....	209.91	8.43 a.m.	209.91	8.23 a.m.	212.1
B. & M. R. R. Co.'s bridge	5.10 p.m.	221.7	11.20 a.m.	218.2	11.14 a.m.	218.3	3.07 p.m.	222.6
W. S. R. R. bridge, Pattersonville	4.12 p.m.	235.0	10.25 a.m.	232.08	12.23 a.m.	233.5	2.20 p.m.	235.5
Amsterdam bridge	....	251.5	....	249.6	....	249.7	....	251.7
Tribes Hill bridge	....	270.0	....	268.2	....	268.3	....	270.5
Fultonville bridge	....	276.6	....	274.6	....	274.8	....	277.0
Canajoharie bridge	....	288.4	....	286.0	....	285.7	....	288.9
Fort Plain bridge	....	295.3	....	293.2	....	292.6	....	295.8
St. Johnsville bridge	....	301.0	....	299.1	....	298.8	....	302.0

Current Meter Discharge Measurements on the Black River Canal, at the Highway Bridge below Lock No. 7.

DATE.	Width.	Area of section.	Mean velocity.	Elevation of water-surface.	Discharge.
1905.	*Feet.*	*Square feet.*	*Ft. per sec'd.*	*Feet.*	*Second-feet.*
Aug. 17	41.7	145	0.94	488.22	136
Aug. 18	41.7	149	0.79	488.32	117
Sept. 7	41.7	153	1.03	488.40	158
Sept. 22	41.7	148	0.97	488.29	143
Nov. 8	41.7	148	0.89	488.30	131

Current Meter Discharge Measurements on the Black River Canal, below Boonville, N. Y

DATE.	Width.	Area of section.	Mean velocity.	Below dock stick.	Elevation of water surface.	Discharge.
1905.	*Feet.*	*Square feet.*	*Ft. per sec'nd.*	*Feet.*		*Second-feet.*
Aug. 19	40.4	175	1.18	1.75	....	206
Aug. 19	40.4	177	0.99	1.70	....	175
Sept. 1	40.4	179	1.10	1.65	....	197
Nov. 15	40.4	185	1.18	1.50	....	218

The drainage basin of Mohawk river above Delta is shown on the Boonville and Taberg sheets of the U. S. Geological Survey topographic map. From which the following data has been deduced:

Drainage Areas of Mohawk River Basin above Delta.

NAME OF STREAM.	AREA IN SQUARE MILES.	
	Place to place.	Total.
West Branch, Mohawk river	18.5	18.5
East branch, Mohawk river	15.1	33.6
Junction of East and West branches of Lansingkill	14.5	48.1
Lansingkill	28.0	76.1
Stringer brook	14.6	90.7
Big brook	19.2	109.9
Big brook to Delta dam site	27.3	137.2
Delta dam site to State dam, Rome	10.8	148.0

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River, below Lock No. 7, Black River Canal.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	......	......	......	......	......	480.1	480.2	482.2	480.9
2	......	......	......	......	......	......	......	......	480.1	480.0	481.2	480.6
3	......	......	......	......	......	......	......	......	484.4	480.7	480.8	485.0
4	......	......	......	......	......	......	......	......	482.8	480.4	481.7	481.4
5	......	......	......	......	......	......	......	......	481.3	480.2	481.2	481.2
6	......	......	......	......	......	......	......	......	481.2	480.2	482.7	481.0
7	......	......	......	......	......	......	......	......	481.2	480.2	481.6	480.8
8	......	......	......	......	......	......	......	......	480.6	480.2	482.0	480.8
9	......	......	......	......	......	......	......	......	480.4	480.0	481.4	480.9
10	......	......	......	......	......	......	......	......	480.4	480.1	481.2	480.8
11	......	......	......	......	......	......	......	......	480.3	480.2	481.0	480.6
12	......	......	......	......	......	......	......	......	480.8	482.7	481.2	480.5
13	......	......	......	......	......	......	......	......	480.5	482.4	481.8	480.5
14	......	......	......	......	......	......	......	......	480.4	481.5	481.0	480.4
15	......	......	......	......	......	......	......	......	480.2	481.6	480.8	480.2
16	......	......	......	......	......	......	......	......	480.3	481.5	480.8	480.2
17	......	......	......	......	......	......	......	......	480.3	480.6	480.8	480.3
18	......	......	......	......	......	......	......	......	483.6	480.4	480.8	480.4
19	......	......	......	......	......	......	......	......	481.0	483.2	480.8	480.4
20	......	......	......	......	......	......	......	480.2	481.6	482.0	480.6	480.4
21	......	......	......	......	......	......	......	480.2	481.1	481.4	480.4	481.4
22	......	......	......	......	......	......	......	480.1	480.7	481.0	480.5	482.9
23	......	......	......	......	......	......	......	480.1	480.6	481.0	480.4	481.5
24	......	......	......	......	......	......	......	480.0	480.4	480.8	480.6	481.0
25	......	......	......	......	......	......	......	480.0	480.2	480.6	481.1	480.8
26	......	......	......	......	......	......	......	480.0	480.3	480.5	480.7	480.7
27	......	......	......	......	......	......	......	480.0	480.3	480.4	480.8	480.6
28	......	......	......	......	......	......	......	480.0	480.2	480.4	480.5	480.3
29	......	......	......	......	......	......	......	480.1	480.2	480.4	483.8	481.9
30	......	......	......	......	......	......	......	480.4	480.4	480.4	481.7	481.6
31	......	......	......	......	......	......	......	480 2	......	480.5	......	481.0

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River, below Lock No. 7, Black River Canal.

DAY.	Jan	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	481.0	480.8	480.4	481.2	480.0	479.7	482.1	480.0	479.8	480.0	480.2	480.9
2	480.8	480.2	480.4	480.8	480.0	479.6	480.6	480.0	479.8	479.9	480.2	480.8
3	480.7	480.1	480.2	480.8	481.2	479.6	480.4	480.0	479.9	479.8	480.0	479.8
4	480.8	480.2	482.2	481.3	480.4	479.5	480.6	480.6	479.8	479.9	480.2	479.6
5	481.4	480.4	481.0	481.6	480.7	479.6	480.4	480.2	479.8	479.8	480.0	479.8
6	481.0	480.2	480.8	481.0	480.2	479.6	480.2	480.3	479.8	480.0	480.0	480.0
7	480.7	480.4	480.6	480.8	480.0	479.8	480.2	481.1	479.8	480.8	479.9	480.6
8	480.6	480.3	480.4	480.7	480.0	480.1	480.6	480.5	479.8	480.2	479.8	480.0
9	480.5	480.2	480.4	480.9	480.0	480.8	483.0	480.2	479.7	480.0	479.8	480.0
10	480.4	480.2	480.7	480.7	480.0	480.4	481.4	479.9	479.8	480.6	480.0	479.9
11	480.6	480.2	480.4	481.4	480.4	480.4	480.8	480.0	479.7	480.4	480.2	480.0
12	480.4	480.4	480.3	481.8	480.0	479.9	480.4	480.2	479.7	480.3	480.6	479.8
13	480.4	480.2	480.2	481.8	480.4	480.0	480.4	480.1	479.8	480.0	480.3	479.8
14	480.4	480.2	480.1	482.1	480.5	480.0	480.0	480.0	479.8	480.0	480.3	479.8
15	480.4	480.2	479.8	485.0	480.2	479.9	480.0	479.9	479.8	479.9	480.1	481.5
16	480.4	480.1	479.9	482.0	480.0	480.2	480.0	480.0	479.8	479.9	480.2	481.8
17	480.6	480.0	479.8	481.3	479.9	480.5	480.1	479.9	479.8	479.9	480.0	481.0
18	480.4	480.2	479.8	481.1	479.9	480.4	480.2	479.9	479.8	479.9	481.4	480.4
19	480.4	480.1	479.8	481.0	479.8	480.2	480.0	479.8	479.8	479.8	481.4	480.1
20	480.4	480.1	479.9	480.8	479.8	480.1	480.0	479.8	479.8	482.3	480.6	480.0
21	480.8	480.2	479.8	480.6	479.7	480.0	480.0	479.9	479.9	480.6	480.6	480.0
22	483.2	481.7	479.8	480.8	479.7	480.0	480.0	480.0	480.2	480.2	480.8	480.0
23	486.2	481.2	479.8	480.4	479.7	480.1	479.9	479.8	480.3	480.2	480.6	480.4
24	483.8	481.2	479.8	480.2	479.8	480.2	479.9	479.8	479.8	480.1	480.4	479.8
25	481.6	481.8	479.7	480.0	479.8	480.0	479.9	479.9	479.8	480.1	480.4	480.0
26	481.2	481.6	479.8	480.0	479.7	480.0	480.2	479.8	479.8	480.2	480.8	479.8
27	481.0	480.8	483.0	480.0	480.4	480.0	479.7	479.8	479.8	480.2	481.4	479.8
28	480.8	480.4	483.1	480.0	480.2	480.0	479.8	479.8	479.6	481.0	481.2	479.8
29	480.4	......	481.6	480.0	479.9	480.0	480.4	479.8	479.8	480.4	481.0	479.8
30	480.5	......	481.8	480.0	479.8	480.2	480.8	479.8	480.4	480.5	480.8	479.8
31	480.8	......	481.8	......	479.7	......	480.6	479.8	......	480.4	......	482.0

Current Meter Discharge Measurements of Mohawk River near Lock No. 7, Black River Canal, below Delta, N. Y.

DATE.	Hydrographer.	Gage height.	Width.	Area of section.	Mean velocity.	Discharge.
1905.		*Feet.*	*Feet.*	*Square feet.*	*Ft. per second.*	*Second-feet.*
Aug. 8	C. A. Poole	1.3	99.6	281	0.89	250
Aug. 17	C. A. Poole	1.9	99.8	341	1.52	520
Sept. 7	C. A. Poole	2.0	99.8	351	1.66	582
Sept. 22	C. A. Poole	1.6	99.7	311	1.41	440
Nov. 8	C. A. Poole	2.8	100.2	431	2.27	978
Dec. 4	C. A. Poole	2.7	100.2	421	2.14	902
1906.						
Mar. 30	C. A. Poole	2.85	98.6	425.2	2.62	1,114
Mar. 30	C. A. Poole	3.2	98.6	464.7	2.89	1,343
Mar. 31	C. A. Poole	2.68	98.6	405.5	2.45	994
April 1	C. A. Poole	1.90	98.6	337.3	1.56	527
April 1	C. A. Poole	2.45	98.6	376.2	2.28	854
Sept. 20	E. F. Weeks	0.80	83	97.9	1.53	*150

Current Meter Discharge Measurements of Black River Canal, just below Lock No. 7, at Highway Bridge, below Delta, N. Y.

DATE.	Hydrographer.	Gage height.	Elevation of water-surface.	Width.	Area of section.	Mean velocity.	Discharge.
1905.		*Feet.*		*Feet.*	*Square feet.*	*Ft. per second*	*Second feet.*
Aug. 17	C. A. Poole	....	488.22	41.7	145	0.94	136
Aug. 18	C. A. Poole	.....	488.32	41.7	149	0.79	117
Sept. 7	C. A. Poole	.....	488.40	41.7	153	1.03	158
Sept. 22	C. A. Poole	.....	488.29	41.7	148	0.97	143
Nov. 8	C. A. Poole	.....	488.30	41.7	148	0.89	131
1906.							
Sept. 20	E. F. Weeks	3.47	......	41.5	163.65	0.82	133

MOHAWK RIVER BELOW AND ABOVE DAM AT DELTA, N. Y.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River, below Delta Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	503.2	503.1	....	....	502.5	502.2	506.0	502.6	502.4	502.5	502.8	503.3
2	502.9	502.8		....	502.4	502.3	503.0	502.6	502.4	502.4	502.7	502.6
3	502.9	502.8	....	.	503.5	502.4	502.8	502.5	502.5	502.5	502.7	......
4	503.1	..	504.9	....	503.0	502.3	503.4	503.2	502.5	502.5	502.6	.....
5	503.8	....	503.3	....	503.3	502.3	503.0	502.6	502.5	502.7	502.6	..
6	503.3	...	503.1	.	502.8	502.4	502.7	502.5	502.5	502.7	502.6	.....
7	..	...	503.0	....	502.6	502.5	502.6	503.7	502.5	503.4	502.5	......
8	503.0	....	503.0	....	502.5	502.4	502.6	502.9	502.4	502.7	502.5	....
9	503.0	....	502.9	...	502.9	503.5	502.8	502.7	502.5	502.6	502.5	......
10	502.9	......	503.2	.	502.9	502.6	503.5	502.4	502.4	503.0	502.6	.....
11	502.9	...	502.9	...	502.6	502.8	503.3	502.5	502.4	502.9	502.6	...
12	502.8	....	502.8	...	502.5	502.4	502.8	502.6	502.3	502.7	503.1	.....
13	502.8	....	502.8	.	502.5	502.4	502.9	502.5	502.3	502.6	502.9	.....
14	..	....	502.7	....	503.8	502.4	502.5	502.5	502.4	502.6	502.7	.....

*Measurement made by wading 800 feet up-stream from regular section.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River, below Delta Dam—Concluded.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
15	....	....	502.6	....	502.8	502.3	502.6	502.4	502.5	502.6	502.6	....
16	....	....	502.6	....	502.6	502.7	502.5	502.5	502.4	502.6	502.6	504.3
17	....	....	502.6	....	502.5	502.5	502.7	502.5	502.4	502.4	502.5	503.3
18	....	....	502.5	....	502.5	502.9	502.5	502.5	502.4	502.4	502.9	502.7
19	....	....	502.4	....	502.4	502.6	502.6	502.5	502.4	502.5	504.1	502.5
20	....	....	502.5	....	502.4	502.5	502.6	502.4	502.4	500.2	503.2	....
21	....	504.5	502.6	....	502.4	502.5	502.6	502.5	502.5	503.1	502.9	....
22	505.5	504.3	502.5	....	502.4	502.5	502.5	502.6	502.5	502.7	503.4	....
23	508.8	504.1	502.5	....	502.3	502.5	502.5	502.6	502.9	502.9	503.0	....
24	506.1	503.7	502.4	502.7	502.3	502.6	502.5	502.5	502.4	502.7	502.9	....
25	503.9	503.8	502.4	502.7	502.2	502.5	502.5	502.5	502.4	502.7	502.8	....
26	503.7	504.3	502.5	502.6	502.3	502.4	502.4	502.5	502.4	502.8	502.9	....
27	503.3	503.3	505.1	502.6	502.6	502.4	502.4	502.4	502.5	502.7	503.5	....
28	....	....	....	502.5	502.9	502.5	502.4	502.5	502.4	503.4	503.6	....
29	502.9	....	....	502.6	502.5	502.4	502.4	502.5	502.4	503.2	503.8	....
30	503.0	....	....	502.6	502.4	502.7	502.9	502.5	502.8	503.0	503.1	....
31	503.2	....	....	....	502.3	....	502.9	502.5	....	502.9	....	....

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Mohawk River, above Delta Dam.

DAY.	Jan.	Feb.	March.	April.	May.	June	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	509.6	509.6	509.4	509.6	509.2	509.0	510.6	509.3	509.1	509.3	509.4	509.6
2	509.4	509.3	509.3	509.4	509.1	509.1	509.5	509.3	509.0	509.2	509.3	509.2
3	509.4	509.3	509.3	509.4	509.8	509.1	509.4	509.3	509.1	509.1	509.3	509.3
4	509.6	509.3	510.2	509.6	509.5	509.0	509.7	509.6	509.2	509.1	509.3	509.1
5	509.8	509.3	509.6	509.5	509.6	509.0	509.5	509.6	509.2	509.2	509.2	509.2
6	509.6	509.4	509.6	509.6	509.4	509.2	509.3	509.2	509.1	509.2	509.3	509.3
7	....	509.4	509.5	509.5	509.3	509.3	509.2	509.8	509.0	509.6	509.2	509.5
8	509.3	509.4	509.4	509.6	509.2	509.2	509.3	509.5	509.0	509.4	509.2	509.3
9	509.4	509.4	509.4	509.6	509.5	509.7	509.3	509.4	509.0	509.3	509.1	509.3
10	509.4	509.3	509.6	509.5	509.5	509.3	509.7	509.2	509.0	509.5	509.3	509.3
11	509.5	509.3	509.4	509.7	509.4	509.4	509.6	509.3	509.0	509.4	509.3	509.2
12	509.5	509.3	509.3	509.9	509.2	509.2	509.4	509.3	508.9	509.3	509.5	509.1
13	509.5	509.3	509.4	509.8	509.3	509.2	509.4	509.3	509.0	509.3	509.4	509.2
14	509.3	509.3	509.2	510.0	509.8	509.2	509.2	509.3	509.2	509.2	509.4	509.2
15	509.5	509.2	509.1	511.6	509.4	509.1	509.3	509.2	509.1	509.2	509.3	510.1
16	509.5	509.2	509.1	510.1	509.3	509.4	509.2	509.3	509.1	509.2	509.3	510.0
17	509.6	509.2	509.2	509.9	509.2	509.3	509.3	509.2	509.1	509.1	509.3	509.6
18	509.4	509.2	509.1	509.6	509.2	509.5	509.2	509.2	509.1	509.0	509.4	509.4
19	509.5	509.2	509.0	509.6	509.2	509.3	509.3	509.2	509.1	509.1	509.9	509.2
20	509.4	509.3	509.1	509.6	509.2	509.3	509.3	509.1	509.1	510.6	509.6	509.2
21	....	509.9	509.1	509.5	509.1	509.2	509.3	509.2	509.1	509.5	509.5	509.3
22	510.4	509.9	509.1	509.5	509.1	509.2	509.2	509.3	509.2	509.4	509.7	509.3
23	511.5	509.6	509.1	509.4	509.0	509.2	509.2	509.3	509.5	509.5	509.5	509.2
24	510.6	509.7	509.0	509.3	509.1	509.3	509.2	509.2	509.2	509.3	509.4	509.1
25	510.0	509.8	509.0	509.3	509.0	509.2	509.2	509.2	509.1	509.3	509.4	509.1
26	509.8	510.1	509.0	509.2	509.1	509.2	509.1	509.1	509.1	509.4	509.5	509.1
27	509.5	509.6	510.2	509.3	509.3	509.2	509.0	509.1	509.2	509.3	509.7	509.2
28	....	509.3	510.3	509.2	509.4	509.2	509.1	509.1	509.1	509.7	509.7	509.2
29	509.4	....	509.9	509.3	509.3	509.2	509.1	509.1	509.1	509.6	509.5	509.1
30	509.5	....	509.7	509.3	509.2	509.3	509.4	509.1	509.4	509.5	509.5	509.2
31	509.6	....	509.8	....	509.1	....	509.4	509.1	....	509.4	....	509.6

GAGE READINGS TO DETERMINE THE SURFACE SLOPE OF MOHAWK RIVER.

Table of Water-surface Elevations on Mohawk River, Cohoes Power Co.'s Dam to St. Johnsville.

LOCATION.	JULY 14, 1905.		JULY 21, 1905.		JULY 28, 1905.		AUGUST 2, 1905.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
100 feet west of breakwater, Cohoes Power Co.'s dam					10.30 a.m.	154.50	1.05 p.m.	155.21
Up-stream end, north pier of aqueduct, Crescent					10.45 a.m.	165.13	11.45 a.m.	165.97
West angle, north abutment, Dunsbach Ferry bridge					10.10 a.m.	165.60	11.00 a.m.	166.65
West angle, north abutment, Vischer's Ferry bridge					10.50 a.m.	175.10	10.05 a.m.	176.20
South abutment of toll bridge, Rexford Flats					9.12 a.m.	202.30		203.10
South abutment of dam, Rexford Flats					9.05 a.m.	209.32		209.98
Schenectady Railway Co.'s bridge					9.00 a.m.	209.45		210.35
D. & H. R. R. Co.'s bridge					10.40 a.m.	209.50		210.45
Freeman's bridge					10.45 a.m.	209.50		210.45
N. Y. C. & H. R. R. R. Co.'s bridge					9.00 a.m.	209.60		210.50
Glenville bridge, Schenectady					9.08 a.m.	209.68		210.55
B. & M. R. R. Co.'s bridge					9.00 a.m.	217.50		219.30
W. S. R. R. bridge, Pattersonville					12.00 a.m.	231.50		232.80
							August 5, 1905.	
Amsterdam bridge		249.3		249.6		249.2		249.0
Tribes Hill bridge	July 17	268.5		268.6		267.95		268.0
Fultonville bridge		274.5		275.0		273.85		274.5
Canajoharie bridge		286.5		286.9		285.85		285.2
Fort Plain bridge		293.02		293.4		292.00		292.4
St. Johnsville bridge		298.75		299.5		298.50		298.7

Table of Water-surface Elevations on Mohawk River, Cohoes Power Co.'s Dam to St. Johnsville—(Continued).

LOCATION.	AUGUST 9, 1905.		AUGUST 16, 1905.		AUGUST 18, 1905.		AUGUST 25, 1905.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
100 feet west of breakwater, Cohoes Power Co.'s dam	....	155.0	4.30 p.m.	155.70	8.10 a.m.	155.75	8.10 a.m.	154.50
Up-stream end, north pier of aqueduct, Crescent	....	165.5	4.30 p.m.	166.58	10.00 a.m.	166.40	8.40 a.m.	165.15
West angle, north abutment, Dunsbach Ferry bridge	....	166.3	4.15 p.m.	167.53	10.30 a.m.	167.50	9.00 a.m.	165.60
West angle, north abutment, Vischer's Ferry bridge	....	175.7	3.50 p.m.	177.50	11.20 a.m.	177.20	10.00 a.m.	175.00
South abutment of toll bridge, Rexford Flats	....	202.9	8.50 p.m.	204.00	8.42 a.m.	204.50	9.40 a.m.	201.90
South abutment of dam, Rexford Flats	....	209.8	8.55 p.m.	210.50	8.50 a.m.	210.90	9.43 a.m.	209.25
Schenectady Railway Co.'s bridge	....	210.1	9.25 p.m.	211.20	9.00 a.m.	211.60	9.55 a.m.	209.50
D. & H. R. R. Co.'s bridge	....	210.15	9.55 p.m.	211.25	9.21 a.m.	211.65	10.20 a.m.	209.55
Freeman's bridge	....	210.2	10.01 p.m.	211.30	9.26 a.m.	211.70	10.25 a.m.	209.60
N. Y. C. & H. R. R. R. Co.'s bridge	....	210.2	10.30 p.m.	211.35	9.45 a.m.	211.75	10.40 a.m.	209.65
Glenville bridge, Schenectady	....	210.21	11.20 p.m.	211.71	10.20 a.m.	211.80	10.55 a.m.	209.69
B. & M. R. R. Co.'s bridge	....	218.3	12.01 p.m.	222.50	11.01 a.m.	221.50	1.09 a.m.	217.40
W. S. R. R. bridge, Pattersonville	....	232.2	1.35 p.m.	236.00	11.50 a.m.	234.70	12.20 a.m.	231.45
	August 11,	1905.						
Amsterdam bridge	....	249.4	....	....	....	251.0	....	249.10
Tribes Hill bridge	....	268.0	....	....	....	270.2	....	267.9
Fultonville bridge	....	274.7	....	....	....	277.0	....	274.1
Canajoharie bridge	....	285.4	....	....	....	288.2	....	285.3
Fort Plain bridge	....	292.2	....	....	....	294.6	....	292.0
St. Johnsville bridge	....	298.7	....	....	....	301.0	....	298.5

Table of Water-surface Elevations on Mohawk River, Cohoes Power Co.'s Dam to St. Johnsville - (Continued).

LOCATION.	SEPTEMBER 1, 1905.		SEPTEMBER 5, 1905.		SEPTEMBER 8, 1905.		SEPTEMBER 15, 1905.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
100 feet west of breakwater, Cohoes Power Co.'s dam	8.00 a.m.	155.10			7.45 a.m.	156.5	7.45 a.m.	155.2
Up-stream end, north pier of aqueduct, Crescent	8.30 a.m.	165.40			8.10 a.m.	167.0	8.15 a.m.	165.9
West angle, north abutment, Dunsbach Ferry bridge	9.00 a.m.	166.20			9.15 a.m.	168.3	8.50 a.m.	166.6
West angle, north abutment, Vischer's Ferry bridge	10.00 a.m.	175.70			10.15 a.m.	178.2	9.15 a.m.	176.2
South abutment of toll bridge, Rexford Flats	10.28 a.m.	203.00	10.42 a.m.	210.0	9.22 a.m.	205.3	6.33 p.m.	203.5
South abutment of dam, Rexford Flats	10.32 a.m.	209.90	10.37 a.m.	213.8	9.17 a.m.	211.2	6.35 p.m.	210.2
Schenectady Railway Co.'s bridge	10.23 a.m.	210.25	10.24 a.m.	214.8	9.07 a.m.	212.0	6.45 p.m.	210.5
D. & H. R. R. Co.'s bridge	9.53 a.m.	210.30	9.52 a.m.	215.7	8.50 a.m.	212.2	7.07 p.m.	210.55
Freeman's bridge	9.50 a.m.	210.35	9.46 a.m.	216.0	8.45 a.m.	212.3	7.12 p.m.	210.6
N. Y. C. & H. R. R. R. Co.'s bridge	9.30 a.m.	210.40	9.27 a.m.	216.4	8.25 a.m.	212.5	7.25 p.m.	210.65
Glenville bridge, Schenectady	9.23 a.m.	210.46	5.33 p.m.	217.56	8.15 a.m.	212.61	7.35 p.m.	210.71
B. & M. R. R. Co.'s bridge	1.18 p.m.	219.00	1.10 p.m.	229.0	11.36 a.m.	222.9	7.40 p.m.	219.7
W. S. R. R. bridge, Pattersonville	12.27 p.m.	232.84	12.22 p.m.	240.0	12.30 a.m.	236.8	9.00 a.m.	233.0
Amsterdam bridge		250.0		257.0		251.7		250.5
Tribes Hill bridge		268.7		274.3		270.7		268.8
Fultonville bridge		276.1		284.0		277.8		275.5
Canajoharie bridge		286.6		297.5		290.0		286.8
Fort Plain bridge		293.4		302.8		296.2		293.4
St. Johnsville bridge		299.6		310.1		302.6		299.7

Table of Water-surface Elevations on Mohawk River, Cohoes Power Co.'s Dam to St. Johnsville—(Continued).

LOCATION.	SEPTEMBER 22, 1905.		SEPTEMBER 29, 1905.		OCTOBER 6, 1905.		OCTOBER 13, 1905.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
100 feet west of breakwater, Cohoes Power Co.'s dam	8.10 a.m.	156.0	8.00 a.m.	154.7	8.10 a.m.	154.85	11.50 a.m.	155.8
Up-stream end, north pier of aqueduct, Crescent	8.35 a.m.	166.8	8.25 a.m.	165.5	8.35 a.m.	165.40	12.15 p.m.	166.7
West angle, north abutment, Dunsbach Ferry bridge	9.05 a.m.	167.7	8.50 a.m.	166.0	9.00 a.m.	166.12	12.45 p.m.	167.75
West angle, north abutment, Vischer's Ferry bridge	10.15 a.m.	177.5	9.50 a.m.	175.4	10.00 a.m.	175.4	3.00 p.m.	177.5
South abutment of toll bridge, Rexford Flats	10.59 a.m.	205.8	1.57 p.m.	202.6	9.53 a.m.	202.8	9.35 a.m.	204.9
South abutment of dam, Rexford Flats	10.55 a.m.	211.0	1.52 p.m.	209.55	9.48 a.m.	209.65	9.32 a.m.	211.0
Schenectady Railway Co.'s bridge	10.37 a.m.	211.65	1.42 p.m.	209.75	9.41 a.m.	209.75	9.23 a.m.	211.8
D. & H. R. R. Co.'s bridge	10.18 a.m.	211.7	1.23 p.m.	209.8	9.14 a.m.	209.8	8.53 a.m.	211.85
Freeman's bridge	10.14 a.m.	211.75	1.17 p.m.	209.85	9.10 a.m.	209.85	8.15 a.m.	211.9
N. Y. C. & H. R. R. R. Co.'s bridge	9.55 a.m.	211.8	12.59 p.m.	209.9	8.50 a.m.	209.9	8.30 a.m.	212.0
Glenville bridge, Schenectady	9.46 a.m.	211.8	....	209.91	8.43 a.m.	209.91	8.23 a.m.	212.1
B. & M. R. R. Co.'s bridge	5.10 p.m.	221.7	11.20 a.m.	218.2	11.14 a.m.	218.3	3.07 p.m.	222.6
W. S. R. R. bridge, Pattersonville	4.12 p.m.	235.0	10.25 a.m.	232.08	12.23 a.m.	233.5	2.20 p.m.	235.5
Amsterdam bridge	....	251.5	....	249.6	....	249.7	....	251.7
Tribes Hill bridge	....	270.0	....	268.2	....	268.3	....	270.5
Fultonville bridge	....	276.6	....	274.6	....	274.8	....	277.0
Canajoharie bridge	....	288.4	....	286.0	....	285.7	....	288.9
Fort Plain bridge	....	295.3	....	293.2	....	292.6	....	295.8
St. Johnsville bridge	....	301.0	....	299.1	....	298.8	....	302.0

Table of Water-surface Elevations on Mohawk River, Cohoes Power Co.'s Dam to St. Johnsville —(Continued).

LOCATION.	OCTOBER 20, 1905.		OCTOBER 27, 1905.		NOVEMBER 3, 1905.		NOVEMBER 10, 1905.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
100 feet west of breakwater, Cohoes Power Co.'s dam	10.35 a.m.	155.6	8.00 a.m.	154.9	8.05 a.m.	155.5	8.10 a.m.	155.6
Up-stream end, north pier of aqueduct, Crescent	11.00 a.m.	166.2	8.25 a.m.	165.5	8.30 a.m.	166.1	8.35 a.m.	166.3
West angle, north abutment, Dunsbach Ferry bridge	11.25 a.m.	167.4	9.00 a.m.	166.3	9.05 a.m.	167.2	9.05 a.m.	167.3
West angle, north abutment, Vischer's Ferry bridge	12.05 p.m.	177.3	9.45 a.m.	175.6	9.45 a.m.	176.85	10.00 a.m.	176.9
South abutment of toll bridge, Rexford Flats	10.24 a.m.	204.5	10.02 a.m.	202.9	9.37 a.m.	204.8	9.34 a.m.	204.3
South abutment of dam, Rexford Flats	10.27 a.m.	210.9	9.59 a.m.	209.95	9.34 a.m.	210.4	9.30 a.m.	210.5
Schenectady Railway Co.'s bridge	10.30 a.m.	211.0	9.50 a.m.	210 05	9.27 a.m.	210.95	9.17 a.m.	211.0
D. & H. R. R. Co.'s bridge	9.55 a.m.	211.1	9.30 a.m.	210.01	9.05 a.m.	211.0	8.55 a.m.	211.05
Freeman's bridge	9.48 a.m.	211.2	9.26 a.m.	210.15	9.00 a.m.	211.05	8.50 a.m.	211.05
N. Y. C. & H. R. R. R. Co.'s bridge	9.30 a.m.	211.3	9 07 a.m.	210.2	8.43 a.m.	211 10	8.25 a.m.	211.1
Glenville bridge, Schenectady	11.40 a.m.	211.6	9.00 a.m.	210.21	8.37 a.m.	211.11	8.20 a.m.	211.1
B. & M. R. R. Co.'s bridge	12.00 n.	222.2	2.07 p.m.	218.9	10.15 a.m.	220.00	12.15 p.m.	221.0
W. S. R. R. bridge, Pattersonville	12.45 p.m.	235.0	1.26 p.m.	232.6	11.23 a.m.	234.5	11.23 p.m.	234.6
Amsterdam bridge	....	251.6	....	250.0	....	251.1	....	250.8
Tribes Hill bridge	....	270.5	....	268.6	....	269.8	....	269.8
Fultonville bridge	....	277.8	....	275.2	....	276.8	....	276.7
Canajoharie bridge	....	289.6	....	286.8	....	288.4	....	288.8
Fort Plain bridge	....	295.0	....	293.3	....	295.0	....	295.1
St. Johnsville bridge	....	302.7	....	299.3	....	301.4	....	301.3

Table of Water-surface Elevations on Mohawk River, Cohoes Power Co.'s Dam to St. Johnsville—(Continued).

LOCATION.	NOVEMBER 17, 1905.		NOVEMBER 24, 1905.		DECEMBER 1, 1905.		DECEMBER 8, 1905.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
100 feet west of breakwater, Cohoes Power Co.'s dam	8.00 a.m.	154.9	8.05 a.m.	154.6	8.05 a.m.	156.4	8.05 a.m.	155.8
Up-stream end, north pier of aqueduct, Crescent	8.25 a.m.	165.5	8.30 a.m.	165.0	8.30 a.m.	167.1	8.35 a.m.	166.6
West angle, north abutment, Dunsbach Ferry bridge	9.00 a.m.	166.3	9.00 a.m.	165.9	9.00 a.m.	168.0	9.05 a.m.	167.7
West angle, north abutment, Vischer's Ferry bridge	9.50 a.m.	175.5	9.50 a.m.	175.0	10.00 a.m.	177.9	10.00 a.m.	177.5
South abutment of toll bridge, Rexford Flats	2.11 p.m.	202.8	9.27 a.m.	202.6	2.45 p.m.	205.4	9.16 a.m.	204.8
South abutment of dam, Rexford Flats	2.17 p.m.	209.8	9.37 a.m.	209.5	2.52 p.m.	211.4	9.23 a.m.	211.1
Schenectady Railway Co.'s bridge	2.01 p.m.	209.8	10.20 a.m.	209.6	3.03 p.m.	211.6	9.33 a.m.	211.3
D. & H. R. R. Co.'s bridge	1.39 p.m.	210.0	10.25 a.m.	209.6	3.39 p.m.	211.9	10.13 a.m.	211.5
Freeman's bridge	1.36 p.m.	210 0	10.30 a.m.	209.7	3.44 p.m.	211.9	10.21 a.m.	211.5
N. Y. C. & H. R. R. R. Co.'s bridge	1.26 p.m.	210.0	11.00 a.m.	209.7	4.07 p.m.	211.9	10.41 a.m.	211.7
Glenville bridge, Schenectady	1.20 p.m.	210.05	11.15 a.m.	209.7	4.25 p.m.	212.0	10.50 a.m.	211.76
B. & M. R. R. Co.'s bridge	....	218.6	1.14 p.m.	217.95	3.10 p.m.	220.0	1.08 p.m.	221.9
W. S. R. R. bridge, Pattersonville	....	232.9	2.14 p.m.	232.0	3.58 p.m.	235.0	12.15 p.m.	235.0
Amsterdam bridge	....	250.2	....	249.5	....	252.1	....	251.5
Tribes Hill bridge	....	268.9	....	268.4	....	270.8	....	270.1
Fultonville bridge	....	275.5	....	274.8	....	278.0	....	277.0
Canajoharie bridge	....	287.5	....	286.2	....	289.6	....	289.2
Fort Plain bridge	....	293.7	....	292.9	....	295.6	....	294.5
St. Johnsville bridge	....	300.2	....	299.4	....	302.6	....	301.3

Table of Water-surface Elevations on Mohawk River, Cohoes Power Co.'s Dam to St. Johnsville — (Continued).

LOCATION.	DECEMBER 15, 1905.		DECEMBER 22, 1905.		DECEMBER 29, 1905.		JANUARY 5, 1906.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
100 feet west of breakwater, Cohoes Power Co.'s dam								
Up-stream end, north pier of aqueduct, Crescent								
West angle, north abutment, Dunsbach Ferry bridge								
West angle, north abutment, Vischer's Ferry bridge								
South abutment of toll bridge, Rexford Flats	8.57 a.m.	202.9	10.09 a.m.	205.0	10.29 a.m.	203.0	10.12 a.m.	203.4
South abutment of dam, Rexford Flats	9.07 a.m.	210.0	10.17 a.m.	211.1	10.23 a.m.	210.0	10.06 a.m.	210.3
Schenectady Railway Co.'s bridge	9.18 a.m.	210.2	10.27 a.m.	211.5	10.09 a.m.	210.0	9.51 a.m.	210.3
D. & H. R. R. Co.'s bridge	9.52 a.m.	210.3	11.09 a.m.	212.1	9.33 a.m.	210.1	9.18 a.m.	210.4
Freeman's bridge	9.59 a.m.	210.3	11.16 a.m.	212.1	9.26 a.m.	210.1	9.11 a.m.	210.4
N. Y. C. & H. R. R. R. Co.'s bridge	10.18 a.m.	210.3	11.41 a.m.	212.5	9.03 a.m.	210.2	8.47 a.m.	210.6
Glenville bridge, Schenectady	10.26 a.m.	210.3	11.53 a.m.	212.6	8.54 a.m.	210.3	8.38 a.m.	210.6
B. & M. R. R. Co.'s bridge	12.39 p.m.	218.5	3.27 p.m.	225.5	1.09 p.m.	219.4	1.07 p.m.	222.0
W. S. R. R. bridge, Pattersonville	11.24 a.m.	232.2	2.30 p.m.	237.4	12.22 p.m.	232.9	12.31 p.m.	234.0
Amsterdam bridge		249.9		252.3		250.2		250.7
Tribes Hill bridge		268.7		272.0		268.9		270.7
Fultonville bridge		275.9		279.7		275.6		277.6
Canajoharie bridge		287.3		291.0		287.7		288.5
Fort Plain bridge		293.0		297.2		295.2		295.0
St. Johnsville bridge		299.5		303.9		301.4		301.8

Table of Water-surface Elevations on Mohawk River, Cohoes Power Co.'s Dam to St. Johnsville—(Continued).

LOCATION.	JANUARY 12, 1906.		JANUARY 19, 1906.		JANUARY 26, 1906.		FEBRUARY 2, 1906.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
100 feet west of breakwater, Cohoes Power Co.'s dam								
Up-stream end, north pier of aqueduct, Crescent								
West angle, north abutment, Dunsbach Ferry bridge								
West angle, north abutment, Vischer's Ferry bridge								
South abutment of toll bridge, Rexford Flats	10.28 a.m.	202.5	10.29 a.m.	203.0	10.47 a.m.	210.5	10.07 a.m.	202.8
South abutment of dam, Rexford Flats	10.22 a.m.	209.3	10.22 a.m.	210.0	10.35 a.m.	214.0	10.01 a.m.	210.0
Schenectady Railway Co.'s bridge	10.10 a.m.		10.08 a.m.	210.1	10.22 a.m.	214.7		
D. & H. R. R. Co.'s bridge	9.24 a.m.	209 4	9.30 a.m.	210.2	9.45 a.m.	215.6	9.13 a.m.	210.1
Freeman's bridge	9.21 a.m.	209.4	9.26 a.m.	210.2	9.37 a.m.	216.0	9.08 a.m.	210.1
N. Y. C. & H. R. R. R. Co.'s bridge	8.53 a.m.	209.5	9.01 a.m.	210.3	9.12 a.m.	216.7	8.45 a.m.	210.3
Glenville bridge, Schenectady	8.40 a.m.	209.5	8.53 a.m.	210.3	9.04 a.m.	217.0	8.00 a.m.	212.7
B. & M. R. R. Co.'s bridge	1.10 p.m.	223.1	2.18 p m.	223.0	2.11 p.m.	229.2	2.15 p.m.	222.8
W. S. R. R. bridge, Pattersonville	12.22 p.m.	235.6	1.26 p.m.	234.5	1.24 p.m.	239.8	1.24 p.m.	233.0
Amsterdam bridge		249.8		250.2		253.0		250.2
Tribes Hill bridge		268.9		268.7		271.7		268.7
Fultonville bridge		276.5		276.0		279.7		277.0
Canajoharie bridge		291 0		289.3		290.6		286.8
Fort Plain bridge		294.7		293.8		297.7		293.3
St. Johnsville bridge		302.0		303.1		305.0		300.0

Table of Water-surface Elevations on Mohawk River, Cohoes Power Co.'s Dam to St. Johnsville—(Continued).

LOCATION.	FEBRUARY 9, 1906.		FEBRUARY 16, 1906.		FEBRUARY 23, 1906.		MARCH 2, 1906.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
100 feet west of breakwater, Cohoes Power Co.'s dam	...	...	...	...	...	...	...	...
Up-stream end, north pier of aqueduct, Crescent	...	...	...	...	...	...	...	...
West angle, north abutment, Dunsbach Ferry bridge	...	...	...	...	...	...	...	...
West angle, north abutment, Vischer's Ferry bridge	...	...	...	...	...	...	...	...
South abutment of toll bridge, Rexford Flats	11.30 a.m.	202.3	11.25 a.m.	202.3	10.55 a.m.	207.1	11 24 a.m.	...
South abutment of dam, Rexford Flats	11.50 a.m.	209.0	11.15 a.m.	209.0	10.50 a.m	212.2	11.14 a.m.	210.0
Schenectady Railway Co.'s bridge	...	...	10.55 a.m.	209.0	10.40 a.m.	212.9	10.53 a.m.	...
D. & H. R. R. Co.'s bridge	...	...	...	...	9.56 a.m.	214.2	10.15 a.m.	...
Freeman's bridge	9.35 a.m.	209.2	9.55 a.m.	209.2	9.47 a.m.	216.0	10.09 a.m.	210.5
N. Y. C. & H. R. R. R. Co.'s bridge	9.00 a.m.	209.6	9.03 a.m.	209.7	9.20 a.m.	218.7	9.50 a.m.	...
Glenville bridge, Schenectady	8.45 a.m.	209.71	8.55 a.m.	209.7	8.30 a.m.	218.96	9.40 a.m.	211.0
B. & M. R. R. Co.'s bridge	...	...	3.30 p.m	222.0	2.17 p.m.	225.6	3.15 p.m.	225.8
W. S. R. R. bridge, Pattersonville	4.50 a.m.	233.8	1.30 p.m.	234.0	1.25 p.m.	236.9	2.26 p.m.	235.1
Amsterdam bridge		250.8	...	...	...	253.8	...	251.2
Tribes Hill bridge	...	268.7	...	...	...	271.5	...	269.6
Fultonville bridge	...	276.5	...	...	...	280.9	...	276.0
Canajoharie bridge	...	...	...	...	...	291.5	...	287.8
Fort Plain bridge	...	292.9	...	...	...	296.5	...	293.5
St. Johnsville bridge	...	302.7	...	...	...	307.5	...	304.0

Table of Water-surface Elevations on Mohawk River, Cohoes Power Co.'s Dam to St. Johnsville—(Continued).

LOCATION.	MARCH 9, 1906.		MARCH 16, 1906.		MARCH 23, 1906.		MARCH 30, 1906.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
100 feet west of breakwater, Cohoes Power Co.'s dam	...	...	...	...	...	...	...	...
Up-stream end, north pier of aqueduct, Crescent	...	...	...	...	...	...	...	...
West angle, north abutment, Dunsbach Ferry bridge	...	...	...	...	...	...	...	...
West angle, north abutment, Vischer's Ferry bridge	...	...	...	...	...	...	...	...
South abutment of toll bridge, Rexford Flats	10.05 a.m.	204.0	10.28 a.m.	202.9	11.00 a.m.	202.3	9.49 a.m.	208.0
South abutment of dam, Rexford Flats	10.00 a.m.	210.6	10.22 a.m.	209.5	10.51 a.m.	209.3	9.43 a.m.	212.9
Schenectady Railway Co.'s bridge	9.45 a.m.	210.8	10.04 a.m.	209.5	*	...	9.31 a.m.	213.4
D. & H. R. R. Co.'s bridge	9.04 a.m.	211.0	9.16 a.m.	209.7	9.32 a.m.	209.5	8.57 a.m.	214.0
Freeman's bridge	8.57 a.m.	211.0	9.07 a.m.	209.7	9.25 a.m.	209.5	8.52 a.m.	214.3
N. Y. C. & H. R. R. R. Co.'s bridge	8.35 a.m.	...	8.38 a.m.	209.8	9.00 a.m.	209.8	8.28 a.m.	214.8
Glenville bridge, Schenectady	8.25 a.m.	211.6	8.25 a.m.	210.0	8.52 a.m.	209.8	8.20 a.m.	215.0
B. & M. R. R. Co.'s bridge	2.10 p.m.	220.5	11.35 a.m.	218.0	3.10 p.m.	218.2	2.07 p.m.	226.0
W. S. R. R. bridge, Pattersonville	1.22 p.m.	233.8	1.20 a.m.	232.1	2.27 p.m.	232.0	1.19 p.m.	238.0
Amsterdam bridge	...	250.8	...	250.2	...	249.5	...	254.0
Tribes Hill bridge	...	269.2	...	268.7	...	268.2	...	272.7
Fultonville bridge	...	276.7	...	275.0	...	274.5	...	279.9
Canajoharie bridge	...	287.2	...	287.4	...	286.8	...	292.2
Fort Plain bridge	...	294.0	...	292.3	...	292.3	...	297.8
St. Johnsville bridge	...	303.4	...	301.0	...	300.1	...	304.5

* Ice

Table of Water-surface Elevations on Mohawk River, Cohoes Power Co.'s Dam to St. Johnsville—(Continued).

LOCATION.	APRIL 6, 1906.		APRIL 13, 1906.		APRIL 20, 1906.		APRIL 27, 1906.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
100 feet west of breakwater, Cohoes Power Co.'s dam								
Up-stream end, north pier of aqueduct, Crescent								
West angle, north abutment, Dunsbach Ferry bridge								
West angle, north abutment, Vischer's Ferry bridge								
South abutment of toll bridge, Rexford Flats	10.15 a.m.	206.3	10.07 a.m.	208.5	9.24 a.m.	207.0	8.45 a.m.	203.9
South abutment of dam, Rexford Flats	10.09 a.m.	212.0	10.03 a.m.	213.0	9.30 a.m.	212.2	8.50 a.m.	210.4
Schenectady Railway Co.'s bridge	9.46 a.m.	212.5	9.54 a.m.	213.6	9.43 a.m.	212.7	9.00 a.m.	210.7
D. & H. R. R. Co.'s bridge	9.12 a.m.	213.0	9.13 a.m.	214.5	10.17 a.m.	213.3	9.30 a.m.	210.8
Freeman's bridge	9.08 a.m.	213.1	9.08 a.m.	214.6	10.30 a.m.	213.4	9.34 a.m.	210.8
N. Y. C. & H. R. R. R. Co.'s bridge	8.38 a.m.	213.3	8.48 a.m.	215.0	10.46 a.m.	213.6	9.55 a.m.	210.8
Glenville bridge, Schenectady	8.30 a.m.	213.4	8.40 a.m.	215.2	11.05 a.m.	213.8	10.15 a.m.	210.9
B. & M. R. R. Co.'s bridge	2.10 p.m.	224.8	2.07 p.m.	226.0	12.15 p.m.	225.1	11.05 a.m.	219.4
W. S. R. R. bridge, Pattersonville	1.20 p.m.	237.0	1.21 p.m.	237.9	1.05 p.m.	237.1	11.48 a.m.	234.0
Amsterdam bridge		253.0		254.1		253.5		250.9
Tribes Hill bridge		271.5		272.5		271.7		269.5
Fultonville bridge		278.4		278.8		279.9		276.9
Canajoharie bridge		290.2		290.2		291.5		288.1
Fort Plain bridge		296.2		296.4		297.8		294.7
St. Johnsville bridge		303.9		303.0		305.0		301.2

Table of Water-surface Elevations on Mohawk River, Cohoes Power Co.'s Dam to St. Johnsville — (Continued).

LOCATION.	MAY 4, 1906.		MAY 11, 1906.		MAY 18, 1906.		MAY 25, 1906.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
100 feet west of breakwater, Cohoes Power Co.'s dam								
Up-stream end, north pier of Aqueduct, Crescent								
West angle, north abutment, Dunsbach Ferry bridge								
West angle, north abutment, Vischer's Ferry bridge								
South abutment of toll bridge, Rexford Flats	8.45 a.m.	206.2	8.45 a.m.	203.5	8.40 a.m.	203.0	8.43 a.m.	202.1
South abutment of dam, Rexford Flats	8.48 a.m.	211.9	8.50 a.m.	210.4	8.44 a.m.	210.0	8.50 a.m.	209.4
Schenectady Railway Co.'s bridge	8.58 a.m.	212.4	9.00 a.m.	210.6	8.50 a.m.	210.1	9.00 a.m.	209.5
D. & H. R. R. Co.'s bridge	9.15 a.m.	212.6	9.15 a.m.	210.7	9.03 a.m.	210.2	9.18 a.m.	209.6
Freeman's bridge	9.19 a.m.	212.8	9.20 a.m.	210.7	9.06 a.m.	210.2	9.30 a.m.	209.6
N. Y. C. & H. R. R. R. Co.'s bridge	9.35 a.m.	213.1	9.35 a.m.	210.7	9.30 a.m.	210.2	9.50 a.m.	209.6
Glenville bridge, Schenectady	9.40 a.m.	213.2	9.40 a.m.	210.7	9.40 a.m.	210.2	10.05 a.m.	209.7
B. & M. R. R. Co.'s bridge	10.06 a.m.	224.3	10.07 a.m.	220.0	10.05 a.m.	219.0	11.05 a.m.	218.1
W. S. R. R. bridge, Pattersonville	10.49 a.m.	236.8	11.05 a.m.	233.7	11.30 a.m.	232.7	12.10 p.m.	232.0
Amsterdam bridge		252.8		250.6		250.0		294.5
Tribes Hill bridge		271.5				268.7		
Fultonville bridge		279.2		276.4		275.4		274.7
Canajoharie bridge		290.2		287.2		287.3		285.8
Fort Plain bridge		296.8		294.1		293.7		292.3
St. Johnsville bridge		303.8		300.5		300.5		298.7

Table of Water-surface Elevations on Mohawk River, Cohoes Power Co.'s Dam to St. Johnsville—(Continued).

LOCATION.	JUNE 1, 1906.		JUNE 8, 1906.		JUNE 15, 1906.		JUNE 22, 1906.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
100 feet west of breakwater, Cohoes Power Co.'s dam								
Up-stream end, north pier of aqueduct, Crescent								
West angle, north abutment, Dunsbach Ferry bridge								
West angle, north abutment, Vischer's Ferry bridge								
South abutment of toll bridge, Rexford Flats	8.55 a.m.	203.5	9.05 a.m.	202.6	8.48 a.m.	202.1	8.55 a.m.	202.9
South abutment of dam, Rexford Flats	9.00 a.m.	210.3	9.10 a.m.	209.9	8.56 a.m.	209.5	9.00 a.m.	209.8
Schenectady Railway Co.'s bridge	9.15 a.m.	210.4	9.25 a.m.	209.9	9.05 a.m.	209.5	9.10 a.m.	209.9
D. & H. R. R. Co.'s bridge	9.50 a.m.	210.5	10.15 a.m.	209.9	9.45 a.m.	209.5	9.41 a.m.	210.0
Freeman's bridge	10.00 a.m.	210.5	10.20 a.m.	209.9	9.50 a.m.	209.5	9.46 a.m.	210.0
N. Y. C. & H. R. R. R. Co.'s bridge	10.25 a.m.	210.6	10.35 a.m.	209.9	10.10 a.m.	209.6	10.06 a.m.	210.0
Glenville bridge, Schenectady	10.35 a.m.	210.6	10.40 a.m.	209.9	10.16 a.m.	209.6	10.12 a.m.	210.1
B. & M. R. R. Co.'s bridge	11.05 a.m.	220.0	1.05 p.m.	218.2	11.20 a.m.	218.1	12.10 p.m.	218.7
W. S. R. R. bridge, Pattersonville	12.20 p.m.	233.3	2.05 p.m.	232.2	12.17 p.m.	231.9	1.20 p.m.	232.4
Amsterdam bridge		250.2		249.5		249.4		249.8
Tribes Hill bridge		269.2		268.5		268.2		268.2
Fultonville bridge		275.3		274.9		274.6		274.8
Canajoharie bridge		286.4		286.0		285.4		285.8
Fort Plain bridge		293.0		292.5		292.1		292.4
St. Johnsville bridge		299.1		298.9		298.6		298.4

Table of Water-surface Elevations on Mohawk River, Cohoes Power Co.'s Dam to St. Johnsville—(Continued).

LOCATION.	JUNE 29, 1906.		JULY 6, 1906.		JULY 13, 1906.		JULY 20, 1906.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
100 feet west of breakwater, Cohoes Power Co.'s dam								
Up-stream end, north pier of aqueduct, Crescent								
West angle, north abutment, Dunsbach Ferry bridge								
West angle, north abutment, Vischer's Ferry bridge								
South abutment of toll bridge, Rexford Flats	9.05 a.m.	202.1	3.30 p.m.	203.3	2.10 p.m.	202.8	8.55 a.m.	201.9
South abutment of dam, Rexford Flats	9.15 a.m.	209.4	3.20 p.m.	210.0	2.25 p.m.	209.8	9.00 a.m.	209.3
Schenectady Railway Co.'s bridge	9.25 a.m.	209.4	3.10 p.m.	210.1	2.40 p.m.	210.0	9.10 a.m.	209.3
D. & H. R. R. Co.'s bridge	9.57 a.m.	209.4	1.45 p.m.	210.3	3.40 p.m.	210.0	10.02 a.m.	209.3
Freeman's bridge	10.03 a.m.	209.4	1.39 p.m.	210.3	3.45 p.m.	210.0	10.06 a.m.	209.3
N. Y. C. & H. R. R. R. Co.'s bridge	10.30 a.m.	209.5	1.15 p.m.	210.4	11.30 a.m.	210.1	10.31 a.m.	209.3
Glenville bridge, Schenectady	10.35 a.m.	209.5	1.05 p.m.	210.4	11.20 a.m.	210.1	10.36 a.m.	209.4
B. & M. R. R. Co.'s bridge	11.10 a.m.	217.5	8.45 a.m.	219.5	10.15 a.m.	218.8	11.05 a.m.	217.1
W. S. R. R. bridge, Pattersonville	12.31 p.m.	231.4	10.30 a.m.	233.1	9.05 a.m.	232.5	12.15 p.m.	231.2
Amsterdam bridge		249.0		250.2		249.5		248.9
Tribes Hill bridge		267.9		268.2		268.5		267.6
Fultonville bridge		274.3		275.9		275.6		274.5
Canajoharie bridge		285.3		287.0		286.4		285.3
Fort Plain bridge		291.9		293.4		293.1		291.8
St. Johnsville bridge		298.4		299.6		299.2		298.4

Table of Water-surface Elevations on Mohawk River, Cohoes Power Co.'s Dam to St. Johnsville—(Continued).

LOCATION.	JULY 27, 1906.		AUGUST 3, 1906.		AUGUST 10, 1906.		AUGUST 17, 1906.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
100 feet west of breakwater, Cohoes Power Co.'s dam								
Up-stream end, north pier of aqueduct, Crescent								
West angle, north abutment, Dunsbach Ferry bridge								
West angle, north abutment, Vischer's Ferry bridge								
South abutment of toll bridge, Rexford Flats	9.45 a.m.	201.0			8.36 a.m.	201.8	8.55 a.m.	202.9
South abutment of dam, Rexford Flats	9.43 a.m.	209.1			8.40 a.m.	209.2	9.00 a.m.	209.8
Schenectady Railway Co.'s bridge	9.36 a.m.	209.1			8.50 a.m.	209.6	9.10 a.m.	209.9
D. & H. R. R. Co.'s bridge	9.06 a.m.	209.1			9.12 a.m.	209.6	9.41 a.m.	210.0
Freeman's bridge	9.03 a.m.	209.1			9.16 a.m.	209.7	9.46 a.m.	210.0
N. Y. C. & H. R. R. R. Co.'s bridge	8.50 a.m.	209.1			9.31 a.m.	209.7	10.06 a.m.	210.0
Glenville bridge, Schenectady	8.45 a.m.	209.1			9.39 a.m.	209.8	10.12 a.m.	210.1
B. & M. R. R. Co.'s bridge	1.20 a.m.	216.0			11.03 a.m.	217.5	12.10 a.m.	218.7
W. S. R. R. bridge, Pattersonville	2.25 a.m.	230.9			12.15 p.m.	233.0	1.20 p.m.	232.4
Amsterdam bridge		248.5		249.0		249.0		248.6
Tribes Hill bridge		267.5		267.7		267.7		267.3
Fultonville bridge		274.1		274.5		274.5		274.1
Canajoharie bridge		284.3		285.0		285.0		284.0
Fort Plain bridge		290.9		291.6		291.6		290.9
St. Johnsville bridge		298.1		298.3		298.5		297.9

Table of Water-surface Elevations on Mohawk River, Cohoes Power Co.'s Dam to St. Johnsville—(Continued).

LOCATION.	AUGUST 24, 1906.		AUGUST 31, 1906.		SEPTEMBER 7, 1906.		SEPTEMBER 14, 1906.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
100 feet west of breakwater, Cohoes Power Co.'s dam								
Up-stream end, north pier of aqueduct, Crescent								
West angle, north abutment, Dunsbach Ferry bridge								
West angle, north abutment, Vischer's Ferry bridge								
South abutment of toll bridge, Rexford Flats	1.55 p.m.	201.7	8.40 a.m.	201.6	1.30 p.m.	201.7	8.40 a.m.	201.0
South abutment of dam Rexford Flats	2.05 p.m.	209.3	8.44 a.m.	209.3	1.15 p.m.	209.0	8.43 a.m.	208.8
Schenectady Railway Co.'s bridge	2.15 p.m.	209.4	9.00 a.m.	209.4	1.05 p.m.	209.1	8.53 a.m.	209.2
D. & H. R. R. Co.'s bridge	2.35 p.m.	209.4	9.18 a.m.	209.5	2.05 p.m.	209.1	9.13 a.m.	209.3
Freeman's bridge	2.40 p.m.	209.4	9.23 a.m.	209.5	2.15 p.m.	209.1	9.17 a.m.	209.3
N. Y. C. & H. R. R. R. Co.'s bridge	3.15 p.m.	209.4	9.40 a.m.	209.6	2.40 p.m.	209.1	9.40 a.m.	209.4
Glenville bridge, Schenectady	3.25 p.m.	209.4	9.46 a.m.	209.6	2.50 p.m.	209.2	9.45 a.m.	209.4
B. & M. R. R. Co.'s bridge	4.35 p.m.	216.5	9.30 a.m.	217.0	2.10 p.m.	216.0	11.05 a.m.	216.0
W. S. R. R. bridge, Pattersonville	11.45 a.m.	232.7	10.20 a.m.	231.2	2.12 p.m.	230.5	12.00 m.	230.5
Amsterdam bridge		248.6		249.0		248.6		248.6
Tribes Hill bridge		267.7		268.3		267.8		
Fultonville bridge		274.1		274.0		273.8		273.7
Canajoharie bridge		284.6		284.6		284.2		283.4
Fort Plain bridge		291.3		291.2		290.8		290.5
St. Johnsville bridge		298.0		298.0		298.0		297.8

Table of Water-surface Elevations on Mohawk River, Cohoes Power Co.'s Dam to St. Johnsville — (Continued).

LOCATION.	SEPTEMBER 21, 1906.		SEPTEMBER 28, 1906.		OCTOBER 5, 1906.		OCTOBER 12, 1906.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
100 feet west of breakwater, Cohoes Power Co.'s dam								
Up-stream end, north pier of aqueduct, Crescent								
West angle, north abutment, Dunsbach Ferry bridge								
West angle, north abutment, Vischer's Ferry bridge								
South abutment of toll bridge, Rexford Flats	8.44 a.m.	201.8	8.35 a.m.	202.0	2.15 p.m.	201.5	10.30 a.m.	202.0
South abutment of dam, Rexford Flats	8.48 a.m.	208.8	8.39 a.m.	209.0	2.25 p.m.	209.0	10.20 a.m.	209.5
Schenectady Railway Co.'s bridge	9.00 a.m.	209.0	8.49 a.m.	209.4	2.40 p.m.	209.1	10.05 a.m.	209.6
D. & H. R. R. Co.'s bridge	9.18 a.m.	209.0	9.13 a.m.	209.5	3.15 p.m.	209.2	9.35 a.m.	209.7
Freeman's bridge	9.24 a.m.	209.1	9.18 a.m.	209.5	3.10 p.m.	209.2	9.30 a.m.	209.7
N. Y. C. & H. R. R. R. Co.'s bridge	10.35 a.m.	209.2	9.40 a.m.	209.6	10.30 a.m.	209.3	9.05 a.m.	209.8
Glenville bridge, Schenectady	10.40 a.m.	209.2	9.45 a.m.	209.6	9.00 a.m.	209.3	8.50 a.m.	209.9
B. & M. R. R. Co.'s bridge	8.40 a.m.	216.5	11.05 a.m.	216.5	8.35 a.m.	216.5	3.15 a.m.	217.8
W. S. R. R. bridge, Pattersonville	9.30 a.m.	231.0	12.05 p.m.	231.0	9.45 a.m.	230.8	2.20 a.m.	232.0
Amsterdam bridge		248.7		248.7		248.6		249.0
Tribes Hill bridge		268.0		268.0		267.5		268.2
Fultonville bridge		273.7		274.3		274.0		275.0
Canajoharie bridge		284.5		284.7		284.4		285.5
Fort Plain bridge		290.6		291.3		291.0		293.1
St. Johnsville bridge		298.0		298.3		298.0		298.9

Table of Water-surface Elevations on Mohawk River, Cohoes Power Co.'s Dam to St. Johnsville —(Continued).

LOCATION.	OCTOBER 19, 1906.		OCTOBER 26, 1906.		NOVEMBER 2, 1906.		NOVEMBER 9, 1906.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
100 feet west of breakwater, Cohoes Power Co.'s dam	...	...	...	...	...	...	...	...
Up-stream end, north pier of aqueduct, Crescent	...	...	...	...	...	...	...	...
West angle, north abutment, Dunsbach Ferry bridge	...	...	...	...	...	...	...	...
West angle, north abutment, Vischer's Ferry bridge	...	...	...	...	...	...	...	...
South abutment of toll bridge, Rexford Flats	...	...	12.15 p.m.	202.0	2.15 p.m.	202.5	8.45 a.m.	201.8
South abutment of dam, Rexford Flats	...	...	12.05 p.m.	209.6	2.25 p.m.	209.8	8.50 a.m.	209.2
Schenectady Railway Co.'s bridge	...	...	11.45 a.m.	209.8	2.35 p.m.	209.8	9.00 a.m.	209.2
D. & H. R. R. Co.'s bridge	...	...	11.00 a.m.	209.8	10.55 a.m.	209.9	9.30 a.m.	209.3
Freeman's bridge	...	...	10.50 a.m.	209.8	10.25 a.m.	209.9	9.35 a.m.	209.3
N. Y. C. & H. R. R. R. Co.'s bridge	...	...	10.30 a.m.	209.9	9.30 a.m.	210.0	9.55 a.m.	209.3
Glenville bridge, Schenectady	...	...	10.20 a.m.	210.0	9.20 a.m.	210.0	10.55 a.m.	209.3
B. & M. R. R. Co.'s bridge	...	...	8.35 a.m.	218.0	2.30 p.m.	218.0	12.10 p.m.	217.0
W. S. R. R. bridge, Pattersonville	...	...	9.20 a.m.	232.0	4.00 p.m.	232.0	2.15 p.m.	231.0
Amsterdam bridge	...	248.8	...	249.6	...	249.7	...	249.0
Tribes Hill bridge	...	267.7	...	...	...	268.2	...	...
Fultonville bridge	...	274.1	...	275.0	...	274.9	...	274.3
Canajoharie bridge	...	284.8	...	286.6	...	286.4	...	285.7
Fort Plain bridge	...	291.1	...	293.0	...	292.7	...	291.8
St. Johnsville bridge	...	301.0	...	299.1	...	299.0	...	298.5

Table of Water-surface Elevations on Mohawk River, Cohoes Power Co.'s Dam to St. Johnsville — (Continued).

LOCATION.	NOVEMBER 16, 1906.		NOVEMBER 23, 1906.		NOVEMBER 30, 1906.		DECEMBER 7, 1906.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
100 feet west of breakwater, Cohoes Power Co.'s dam								
Up-stream end, north pier of aqueduct, Crescent								
West angle, north abutment, Dunsbach Ferry bridge								
West angle, north abutment, Vischer's Ferry bridge								
South abutment of toll bridge, Rexford Flats	1.30 p.m.	202.8	11.45 a.m.	205.5	12.00 m.	204.0	11.40 a.m.	203.6
South abutment of dam, Rexford Flats	1.35 p.m.	209.8	11.40 a.m.	212.1	11.55 a.m.	210.9	11.35 a.m.	210.5
Schenectady Railway Co.'s bridge	1.45 p.m.	209.8	11.30 a.m.	212.1	11.50 a.m.	210.9	11.25 a.m.	210.5
D. & H. R. R. Co.'s bridge	2.25 p.m.	209.9	10.55 a.m.	212.2	11.20 a.m.	211.0	10.55 a.m.	210.6
Freeman's bridge	2.30 p.m.	209.9	10.50 a.m.	212.2	11.15 a.m.	211.0	10.50 a.m.	210.6
N. Y. C. & H. R. R. R. Co.'s bridge	2.55 p.m.	209.9	10.20 a.m.	212.3	10.55 a.m.	211.0	10.30 a.m.	210.6
Glenville bridge, Schenectady	5.05 p.m.	209.9	10.14 a.m.	212.3	10.50 a.m.	211.0	10.25 a.m.	210.6
B. & M. R. R Co.'s bridge	10.30 a.m.	218.0	8.35 a.m.	223.0	9.50 a.m.	220.9	9.50 a.m.	223.0
W. S. R. R. bridge, Pattersonville	9.00 a.m.	232.3	9.35 a.m.	235.5	8.50 a.m.	234.0	8.45 a.m.	234.0
Amsterdam bridge		249.8		251.3		250.9		251.3
Tribes Hill bridge		268.3		270.2		269.5		
Fultonville bridge		275.0		277.5		276.7		277.1
Canajoharie bridge				288.7		288.0		289.8
Fort Plain bridge		292.2		295.2		294.6		294.4
St. Johnsville bridge		298.8		301.3		300.6		302.1

Table of Water-surface Elevations on Mohawk River, Cohoes Power Co.'s Dam to St. Johnsville—(Concluded).

LOCATION.	DECEMBER 14, 1906.		DECEMBER 21, 1906.		DECEMBER 28, 1906.		JANUARY 4, 1907.		JANUARY 11, 1907.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
100 feet west of breakwater, Cohoes Power Co.'s dam										
Up-stream end, north pier of aqueduct, Crescent										
West angle, north abutment, Dunsbach Ferry bridge										
West angle, north abutment, Vischer's Ferry bridge										
South abutment of toll bridge, Rexford Flats	12.30 p.m.	202.5	10.35 a.m.	203.0	2.40 p.m.	203.0	10.10 a.m.	208.5	10.30 a.m.	204.9
South abutment of dam, Rexford Flats	12.25 p.m.	209.6	10.45 a.m.	210.0	2.35 p.m.	209.6	10.05 a.m.	213.4	10.25 a.m.	211.1
Schenectady Railway Co.'s bridge	12.10 p.m.	209.6	10.55 a.m.	210.0	2.20 p.m.	209.6	9.50 a.m.	213.6	10.15 a.m.	211.4
D. & H. R. R. Co.'s bridge	11.30 a.m.	209.7	11.30 a.m.	210.1	1.40 p.m.	209.7	11.05 a.m.	214.2	9.40 a.m.	211.7
Freeman's bridge	11.25 a.m.	209.7	11.36 a.m.	210.1	1.30 p.m.	209.7	11.10 a.m.	214.7	9.35 a.m.	211.8
N. Y. C. & H. R. R. R. Co.'s bridge	11.05 a.m.	209.8	12.00 m.	210.1	1.05 p.m.	209.7	11.35 a.m.	215.1	9.15 a.m.	211.9
Glenville bridge, Schenectady	11.00 a.m.	209.8	3.25 p.m.	210.2	12.25 p.m.	209.7	11.45 a.m.	215.6	9.05 a.m.	211.9
B. & M. R. R. Co.'s bridge	9.55 a.m.	222.0	1.10 p.m.	225.0	11.20 a.m.	223.0	2.20 p.m.	229.5	12.05 p.m.	222.0
W. S. R. R. bridge, Pattersonville	8.55 a.m.	233.0	2.25 p.m.	232.5	10.25 a.m.	232.0	1.20 p.m.	240.0	1.40 p.m.	235.0
Amsterdam bridge		250.5		252.0		251.5				
Tribes Hill bridge		269.2		270.9		269.7				
Fultonville bridge		276.2		276.5		276.4				
Canajoharie bridge		288.3		288.6		288.5				
Fort Plain bridge		292.8		293.5		292.8				
St. Johnsville bridge		300.5		300.8		300.5				

Table Showing Water-surface Elevations on Mohawk River between Mindenville and Utica.

LOCATION.	JULY 28, 1905.		AUGUST 5, 1905.		AUGUST 12, 1905.		AUGUST 18, 1905.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
South bank, about 1,200 feet west of lock No. 34	9.15	305.1	11.00	305.0	10.00	305.5	2.30	306.2
South bank, about 300 feet west of canal bridge No. 125	9.30	306.9	11.10	306.7	....	....	3.30	308.6
South bank, about 150 feet west of canal bridge No. 127	10.10	309.8	11.40	309.8	10.30	310.4	1.35	312.0
South bank, about 700 feet below Rocky Rift dam	11.10	313.8	9.50	315.4	9.15	316.1	9.30	316.5
Southwest corner of masonry, 50 feet above Rocky Rift dam	11.14	320.1	9.45	320.6	9.00	321.0	9.40	321.9
South abutment of suspension bridge near bridge No. 132	12.00	320.9	8.35	320.6	11.05	321.0	8.40	322.1
North abutment of William street bridge, Little Falls	12.15	334.0	8.40	335.2	8.15	335.2	8.20	337.0
North abutment of Hansen avenue bridge, Little Falls	....	....	....	....	....	....	....	....
On pier of southerly bridge, Hansen avenue, Little Falls	9.00	363.17	....	....	8.30	363.6	8.00	364.5
South bank, west side of gang plank, Jacksonburg Ferry	....	....	....	....	....	....	....	....
South bank, opposite canal bridge, No. 14	10.50	364.72	9.15	364.9	9.20	365.6	8.45	366.8
South bank, about 200 feet above island	10.30	374.42	9.40	374.6	9.45	374.9	9.05	376.0
South bank, about opposite lock No. 41, Erie canal	....	....	....	....	....	....	....	....
South bank, about 500 feet above Hydraulic canal	10.00	374.62	9.50	374.9	9.52	375.6	9.12	377.3
On Washington street bridge, Herkimer	....	....	....	....	....	....	....	....
South wing, west abutment, Herkimer-Mohawk road bridge	....	....	....	....	....	....	....	....
South bank, below Fulmer creek	11.45	378.9	10.12	379.1	10.10	380.4	9.35	382.9
South bank, just above Fulmer creek	11.40	382.0	10.18	382.2	10.14	383.2	9.45	384.6
South abutment, bridge opposite Frankfort to N. Y. C. & H. R. R. R. station	....	....	....	....	....	....	....	....
South bank about 700 feet above East Schuyler road bridge	9.50	383.2	11.30	383.7	11.23	385.2	10.50	388.3
On middle abutment, East Schuyler road bridge	....	....	....	....	....	....	....	....
South bank, below Bargy's farmhouse	10.55	384.8	11.50	385.2	11.45	387.0	11.05	389.7
South bank, below Ripley's Rift	11.40	387.1	12.10	387.5	12.07	389.0	11.22	391.7
South bank, below Ripley's farmhouse	12.30	389.2	12.40	390.1	12.20	391.3	11.35	393.2
On middle pier, Harbor-Schuyler road bridge	....	....	....	....	....	....	....	....
On middle pier, West Schuyler road bridge	....	....	....	....	....	....	....	....
North bank about 300 feet above Ferguson's creek	9.55	390.13	1.18	391.1	1.10	393.3	12.05	394.2

Table Showing Water-surface Elevations on Mohawk River between Mindenville and Utica —(Continued).

LOCATION.	AUGUST 25, 1905.		SEPTEMBER 1, 1905.		SEPTEMBER 5, 1905.		SEPTEMBER 8, 1905.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
South bank, about 1,200 feet west of lock No. 34	11.30	305.1	9.41	305.7	10.30	315.5	9.50	307.5
South bank, about 300 feet west of canal bridge No. 125	....	....	....	....	....	....	....	....
South bank, about 150 feet west of canal bridge No. 127	11.50	309.4	....	....	10.35	320.7	10.20	313.8
South bank, about 700 feet below Rocky Rift dam	12.20	315.2	11.10	316.6	....	326.4	10.48	319.7
Southwest corner of masonry, 50 feet above Rocky Rift dam	12.23	320.5	11.15	321.3	11.15	327.0	10.55	322.6
South abutment of suspension bridge, near bridge No. 132	12.55	320.6	11.49	321.2	11.53	329.7	11.30	323.2
North abutment of William street bridge, Little Falls	1.05	334.0	12.05	335.6	12.10	342.8	11.50	337.8
North abutment of Hansen avenue bridge, Little Falls	....	....	1.30	364.6	1.30	368.0	1.01	364.9
On pier of southerly bridge, Hansen avenue, Little Falls	....	....	....	....	....	....	....	....
South bank, west side of gang plank, Jacksonburg Ferry	....	....	2.13	364.0	....	....	1.30	365.3
South bank, opposite canal bridge, No. 14	....	....	2.40	365.6	....	....	1.57	368.3
South bank, about 200 feet above island	4.55	374.2	....	....	....	....	....	....
South bank, about opposite lock No. 41, Erie canal	....	....	3.30	369.1	....	379.3	2.30	372.5
South bank, about 500 feet above Hydraulic canal	....	....	....	....	....	....	....	....
On Washington street bridge, Herkimer	....	....	4.00	376.0	2.50	383.3	3.03	378.7
South wing, west abutment, Herkimer-Mohawk road bridge	....	....	9.00	379.4	9.05	386.3	9.00	383.4
South bank, below Fulmer creek	9.40	379.4	9.30	380.3	....	389.2	9.30	385.0
South bank, just above Fulmer creek	9.50	382.4	9.45	383.2	....	389.2	9.45	386.2
South abutment, bridge opposite Frankfort to N. Y. C. & H. R. R. R. station	....	....	11.05	383.8	10.45	392.0	3.45	389.0
South bank about 700 feet above East Schuyler road bridge	11.10	384.1	11.55	385.2	....	....	11.05	391.5
On middle abutment, East Schuyler road bridge	....	....	11.35	384.5	11.05	393.1	10.50	390.6
South bank, below Bargy's farmhouse	11.30	385.5	12.20	386.8	....	....	11.25	393.0
South bank, below Ripley's Rift	11.50	387.5	12.45	388.7	11.50	397.7	11.45	395.2
South bank, below Ripley's farmhouse	12.10	390.2	1.05	391.0	....	398.8	12.45	396.2
On middle pier, Harbor-Schuyler road bridge	....	....	1.25	390.7	....	399.4	1.30	396.4
On middle pier, West Schuyler road bridge	....	....	1.40	391.4	....	401.5	1.50	397.0
North bank, about 300 feet above Ferguson's creek	12.50	391.5	1.50	392.1	....	401.5	2.05	397.4

Table Showing Water-surface Elevations on Mohawk River between Mindenville and Utica —(Continued).

LOCATION.	SEPTEMBER 15, 1905.		SEPTEMBER 22, 1905.		SEPTEMBER 29, 1905.		OCTOBER 6, 1905.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
South bank, about 1,200 feet west of lock No. 34	10.30	305.7	9.38	306.5	9.38	306.35	10.20	305.5
South bank, about 300 feet west of canal bridge No. 125	......	......	......	......	......	......	......	......
South bank, about 150 feet west of canal bridge No. 127	10.03	310.9	10.05	312.4	10.06	310.15	11.00	310.1
South bank, about 700 feet below Rocky Rift dam	9.42	316.6	10.33	318.0	10.45	315.5	11.45	315.6
Southwest corner of masonry, 30 feet above Rocky Rift dam	9.30	319.0	10.40	321.7	10.47	320.4	11.50	320.7
South abutment of suspension bridge, near bridge No. 132	8.35	320.9	11.21	321.8	11.25	320.5	12.30	320.6
North abutment of William street bridge Little Falls	12.00	335.3	11.43	336.7	11.45	335.4	2.00	335.4
North abutment of Hansen avenue bridge, Little Falls	1.15	364.6	1.12	364.1	1.15	363.6	2.20	363.5
On pier of southerly bridge, Hansen avenue, Little Falls	......	......	......	......	......	......	......	......
South bank, west side of gang plank, Jacksonburg Ferry	1.41	364.1	1.45	364.8	5.15	364.0	3.00	363.55
South bank, opposite canal bridge No. 14	2.15	365.8	2.15	366.5	4.45	365.6	3.30	364.72
South bank, about 200 feet above island	......	......	......	......	......	......	......	......
South bank, about opposite lock No. 41 Erie canal	2.45	370.0	2.45	370.6	4.15	369.1	4.00	369.0
South bank, about 500 feet above Hydraulic canal	......	......	......	......	......	......	......	......
On Washington street bridge, Herkimer	3.15	376.0	3.25	376.7	10.29	383.3	......	......
South wing, west abutment, Herkimer-Mohawk road bridge	9.00	379.4	9.30	379.1	8.40	378.7	8.15	378.7
South bank, below Fulmer creek	9.20	380.5	10.20	380.8	9.20	379.5	9.00	379.5
South bank, just above Fulmer creek	9.35	381.6	10.45	382.0	......	......	9.10	382.7
South abutment bridge opposite Frankfort to N. Y. C. & H. R. R. R. station	10.30	384.2	11.35	385.1	10.29	383.3	10.00	383.4
South bank, about 700 feet above East Schuyler road bridge	11.15	385.6	12.25	386.4	11.18	384.2	10.55	384.2
On middle abutment, East Schuyler road bridge	11.00	385.0	12.00	385.8	11.05	383.7	10.40	383.8
South bank, below Bargy's farmhouse	11.40	387.2	1.55	387.8	11.50	385.9	11.30	386.0
South bank, below Ripley's Rift	12.05	388.9	2.30	389.9	12.50	387.7	12.35	387.8
South bank, below Ripley's farmhouse	12.20	390.9	2.45	391.5	1.25	390.2	12.50	390.3
On middle pier, Harbor-Schuyler road bridge	12.40	391.0	3.10	391.4	2.45	390.0	1.25	390.4
On middle pier, West Schuyler road bridge	1.05	391.7	3.40	392.2	3.20	390.7	2.00	390.6
North bank, about 300 feet above Ferguson's creek	1.20	392.7	4.00	393.1	3.30	391.7	2.15	391.6

Table Showing Water-surface Elevations on Mohawk River between Mindenville and Utica—(Continued).

LOCATION.	OCTOBER 13, 1905.		OCTOBER 20. 1905.		OCTOBER 27, 1905.		NOVEMBER 3, 1905.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
South bank, about 1,200 feet west of lock No. 34	11.05	308.2	9.45	307.75	9.50	305.8	10.15	306.7
South bank, about 300 feet west of canal bridge No. 125	....	....	....	....	....	....	....	....
South bank, about 150 feet west of canal bridge No. 127	11.45	313.6	10.20	314.0	10.30	311.1	10.45	312.8
South bank, about 700 feet below Rocky Rift dam	1.00	318.4	10.40	319.7	11.20	319.8	11.25	318.2
Southwest corner of masonry, 50 feet above Rocky Rift dam	1.05	322.5	10.45	322.6	11.25	321.1	11.30	321.7
South abutment of suspension bridge, near bridge No. 132	1.45	323.0	11.20	323.0	11.50	321.1	12.20	321.9
North abutment of William street bridge, Little Falls	2.00	337.7	11.35	337.7	12.05	335.6	12.40	336.6
North abutment of Hansen avenue bridge, Little Falls	3.20	365.0	11.40	365.0	1.30	363.7	2.10	364.4
On pier of southerly bridge, Hansen avenue, Little Falls	....	....	....	....	....	....	....	....
South bank, west side of gang plank, Jacksonburg Ferry	4.05	366.05	2.00	366.5	2.00	364.4	2.40	365.0
South bank, opposite canal bridge No. 14	4.55	368.32	2.30	368.22	2.30	365.72	3.00	366.62
South bank, about 200 feet above island	....	....	....	....	....	....	....	....
South bank, about opposite lock No. 41, Erie canal	5.10	372.7	2.55	372.32	2.55	369.02	3.30	370.72
South bank, about 500 feet above Hydraulic canal	....	....	....	....	....	....	....	....
On Washington street bridge, Herkimer	5.30	378.8	3.15	378.4	3.20	375.9	3.30	377.7
South wing, west abutment, Herkimer-Mohawk road bridge	4.15	382.5	2.35	382.1	9.30	378.9	2.55	380.0
South bank, below Fulmer creek	3.45	384.1	2.10	383.4	9.55	379.9	2.35	381.2
South bank, just above Fulmer creek	3.30	387.5	1.55	386.7	10.10	383.0	2.20	383.8
South abutment bridge opposite, Frankfort to N. Y. C. & H. R. R. R. station	2.15	388.4	12.40	378.9	11.05	383.9	1.10	385.4
South bank, about 700 feet above East Schuyler road bridge	1.30	390.6	11.45	389.9	11.50	384.9	12.25	386.9
On middle abutment, East Schuyler road bridge	1.40	389.7	12.00	389.3	11.40	384.4	12.35	386.3
South bank, below Bargy's farmhouse	12.50	392.4	11.15	391.7	12.20	386.7	11.55	388.5
South bank, below Ripley's Rift	11.25	394.7	10.30	394.0	1.05	388.4	11.15	390.4
South bank, below Ripley's farmhouse	11.00	395.8	9.55	395.3	1.25	390.7	10.50	392.1
On middle pier, Harbor-Schuyler road bridge	10.15	396.2	9.15	395.7	2.05	390.8	10.15	392.5
On middle pier, West Schuyler road bridge	9.40	396.7	8.40	396.3	2.35	391.3	9.45	392.9
North bank, about 300 feet above Ferguson's creek	9.30	397.2	8.30	396.8	3.00	392.3	9.35	393.7

Table Showing Water-surface Elevations on Mohawk River between Mindenville and Utica—(Continued).

LOCATION.	NOVEMBER 10, 1905.		NOVEMBER 17, 1905.		NOVEMBER 24, 1905.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
South bank, about 1,200 feet west of lock No. 34	3.45	306.9	10.00	305.9	10.10	305.8
South bank, about 300 feet west of canal bridge No. 125	....	....	....	....	....	....
South bank, about 150 feet west of canal bridge No. 127	3.25	312.7	10.30	311.5	10.40	310.9
South bank, about 700 feet below Rocky Rift dam	3.00	318.2	11.00	317.2	11.05	316.4
Southwest corner of masonry, 50 feet above Rocky Rift dam	2.55	321.8	11.05	321.5	11.08	321.1
South abutment of suspension bridge, near bridge No. 132	2.35	322.0	11.40	321.7	11.45	321.1
North abutment of William street bridge, Little Falls	2.10	336.8	11.55	335.9	12.00	335.5
North abutment of Hansen avenue bridge, Little Falls	8.45	364.5	1.30	363.9	1.40	363.4
On pier of southerly bridge, Hansen avenue, Little Falls	....	....	....	....	....	....
South bank, west side of gang plank, Jacksonburg Ferry	9.30	365.2	2.00	364.6	2.05	364.0
South bank, opposite canal bridge No. 14	10.00	366.82	2.40	366.0	2.45	365.4
South bank, about 200 feet above island	....	....	....	....	....	....
South bank, about opposite lock No. 41, Erie canal	10.40	371.02	3.10	370.3	3.20	369.7
South bank, about 500 feet above Hydraulic canal	....	....	....	....	....	....
On Washington street bridge, Herkimer	3.00	377.6	3.30	376.5	3.35	375.8
South wing, west abutment, Herkimer-Mohawk road bridge	2.30	380.8	3.00	379.8	3.00	379.0
South bank, below Fulmer creek	2.05	382.0	2.30	380.9	2.32	380.0
South bank, just above Fulmer creek	1.55	384.2	2.20	383.7	2.23	383.1
South abutment, bridge opposite Frankfort to N. Y. C. & H. R. R. R. station	12.48	386.3	1.15	385.1	1.17	383.9
South bank, about 700 feet above East Schuyler road bridge	12.08	388.0	12.20	386.4	12.25	385.3
On middle abutment, East Schuyler road bridge	12.17	387.4	12.40	386.0	12.25	384.6
South bank, below Bargy's farmhouse	11.42	389.6	11.50	388.1	11.55	387.0
South bank, below Ripley's Rift	11.00	391.7	11.15	390.1	11.15	388.7
South bank, below Ripley's farmhouse	10.36	393.2	10 50	391.8	10.55	390.8
On middle pier, Harbor-Schuyler road bridge	10.08	393.6	10.20	391.9	10.20	391.0
On middle pier, West Schuyler road bridge	9.40	394.0	9.45	392.5	9.50	391.4
North bank, about 300 feet above Ferguson's creek	9.30	394.7	9.30	393.4	9.40	392.3

Table Showing Water-surface Elevations on Mohawk River between Mindenville and Utica —(Concluded).

LOCATION.	DECEMBER 1, 1905.		DECEMBER 8, 1905.		DECEMBER 15, 1905.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
South bank, about 1,200 feet west of lock No. 34	10.20	307.8	9.50	305.9	10.20	305.7
South bank, about 300 feet west of canal bridge No. 125	....	....	....	....	....	....
South bank, about 150 feet west of canal bridge No. 127	10.50	313.7	10.35	313.3	11.00	311.3
South bank, about 700 feet below Rocky Rift dam	11.45	319.5	11.15	318.4	9.15	318.3
Southwest corner of masonry, 50 feet above Rocky Rift dam	11.50	322.4	11.20	321.8	9.10	321.6
South abutment of suspension bridge, near bridge No. 132	12.20	323.0	11.55	321.9	11.50	321.8
North abutment of William street bridge, Little Falls	12.40	337.5	12.10	334.7	12.00	334.6
North abutment of Hansen avenue bridge, Little Falls	2.10	365.1	1.33	364.3	1.30	363.5
On pier of southerly bridge, Hansen avenue, Little Falls	....	....	....	....	....	....
South bank, west side of gang plank, Jacksonburg Ferry	2.30	367.0	2.02	365.0	1.55	364.0
South bank, opposite canal bridge No. 14	3.00	369.72	2.35	366.7	2.35	366.0
South bank, about 200 feet above island	....	....	....	....	....	....
South bank, about opposite lock No. 41, Erie canal	3.35	371.8	3.05	369.7	3.10	369.3
South bank, about 500 feet above Hydraulic canal	....	....	....	....	....	....
On Washington street bridge, Herkimer	3.40	378.2	2.35	377.1	3.25	375.2
South wing, west abutment, Herkimer-Mohawk road bridge	3.00	382.3	3.00	380.5	2.53	378.8
South bank, below Fulmer creek	2.40	383.1	2.32	381.8	2.25	379.6
South bank, just above Fulmer creek	2.20	385.1	2.20	384.1	2.12	382.9
South abutment, bridge opposite Frankfort to N. Y. C. & H. R. R. R. station	1.20	388.1	1.15	386.0	1.18	383.7
South bank, about 700 feet above East Schuyler road bridge	12.25	390.3	....	....	12.35	385.7
On middle abutment, East Schuyler road bridge	12.35	389.5	12.35	387.1	12.45	384.3
South bank, below Bargy's farmhouse	11.55	392.1	....	....	12.00	386.8
South bank, below Ripley's Rift	11.07	394.5	11.12	391.4	11.25	388.4
South bank, below Ripley's farmhouse	10.50	395.9	10.46	392.9	11.00	390.7
On middle pier, Harbor-Schuyler road bridge	10.15	396.2	10.15	393.2	10.20	391.0
On middle pier, West Schuyler road bridge	9.45	396.8	9.42	393.8	9.50	391.5
North bank, about 300 feet above Ferguson's creek	9.35	397.4	9.32	394.4	9.40	392.3

Table Showing Water-surface Elevations on Mohawk River between Utica and Rome.

LOCATION.	July 18–22, 1905.		July 28, 1905.		August 4, 1905.		August 11, 1905.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
West end, north side of pier, Park avenue bridge, Utica	July 20, 4.00 p.m.	394.7	2.50 p.m.	393.8	2.00 p.m.	393.9	1.00 p.m.	394.1
East end, south side of pier, Genesee street bridge, Utica	July 20, 3.00 p.m.	395.3	2.35 p.m.	395.3	1.35 p.m.	395.5	12.40 p.m.	395.5
South wing, east abutment, Black River Division, N. Y. C. & H. R. R. R. bridge, Utica	July 20, 1.30 p.m.	396.6	2.15 p.m.	395.4	1.15 p.m.	395.6	12.15 p.m.	395.6
West wing, south abutment, Schuyler street bridge, Utica	July 20, 11.30 a.m.	396.7	1.50 p.m.	395.8	12.00 m.	395.9	11.50 a.m.	396.1
West wing, north abutment, Whitesboro–Marcy road bridge	July 20, 9.30 a.m.	398.3	11.55 a.m.	396.5	11.20 a.m.	396.7	11.15 a.m.	397.0
East wing, south abutment, Carey's Crossing road bridge, Whitesboro	July 20, 8.15 a.m.	401.9	11.25 a.m.	400.1	11.00 a.m.	400.1	10.50 a.m.	400.6
East wing, north abutment, Oriskany Dyke road bridge, Oriskany	July 19, 3.00 p.m.	407.3	10.45 a.m.	405.9	10.25 a.m.	405.9	10.15 a.m.	406.2
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, 4 miles east of Rome	July 19, 10.00 a.m.	415.3	9.35 a.m.	415.1	9.30 a.m.	415.2	9.00 a.m.	415.6
West wing, east abutment, Mill street bridge, Rome	July 19, 8.00 a.m.	423.0	9.00 a.m.	422.8	8.55 a.m.	422.8	8.25 a.m.	423.2
West abutment, below State dam, Rome	July 18, 3.00 p.m.	428.9	8.50 a.m.	428.5	8.45 a.m.	428.4	8.10 a.m.	428.7
West abutment, above State dam, Rome	July 18, 2.30 p.m.	431.7	8.50 a.m.	431.2	8.45 a.m.	431.5	8.10 a.m.	431.6
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, Rome	July 18, 2.15 p.m.	432.1	8.40 a.m.	431.6	8.20 a.m.	431.9	7.45 a.m.	432.0
North wing, west abutment, East Dominick street bridge, Rome	July 18, 2.00 p.m.	432.2	8.35 a.m.	431.7	8.15 a.m.	432.0	7.40 a.m.	432.1
South wing, east abutment, Floyd avenue bridge, Rome	July 22, 11.00 a.m.	446.7	8.15 a.m.	446.7	8.05 a.m.	446.7	7.25 a.m.	446.7

Table Showing Water-surface Elevations on Mohawk River between Utica and Rome —(Continued).

LOCATION.	AUGUST 18, 1905.		AUGUST 25, 1905.		SEPTEMBER 1, 1905.		SEPTEMBER 4, 1905.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
West end, north side of pier, Park avenue bridge, Utica	2.40 p.m.	396.5	1.10 p.m.	394.0	1.20 p.m.	394.8	....	....
East end, south side of pier, Genesee street bridge, Utica	2.20 p.m.	397.4	12.55 p.m.	395.5	1.05 p.m.	396.2	....	....
South wing, east abutment, Black River Division, N. Y. C. & H. R. R. R. bridge, Utica	12.05 p.m.	398.0	12.35 p.m.	395.6	12.35 p.m.	396.4	....	....
West wing, south abutment, Schuyler street bridge, Utica	11.45 a.m.	398.4	11.50 a.m.	396.0	12.05 p.m.	396.7	6.30 p.m.	406.0
West wing, north abutment, Whitesboro-Marcy road bridge	11.10 a.m.	400.8	11.15 a.m.	396.8	11.30 a.m.	398.2	4.15 p.m.	409.2
East wing, south abutment, Carey's Crossing road bridge, Whitesboro	10.45 a.m.	403.1	10.50 a.m.	400.3	11.00 a.m.	401.3	3.45 p.m.	413.0
East wing, north abutment, Oriskany Dyke road bridge, Oriskany	10.15 a.m.	407.4	10.10 a.m.	406.0	10.25 a.m.	406.1	....	....
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, 4 miles east of Rome	9.15 a.m.	417.1	9.00 a.m.	415.3	9.15 a.m.	415.2	2.40 p.m.	426.0
West wing, east abutment, Mill street bridge, Rome	8.30 a.m.	423.8	8.20 a.m.	422.9	8.35 a.m.	422.7	....	....
West abutment, below State dam, Rome	8.15 a.m.	429.0	8.05 a.m.	428.6	8.20 a.m.	428.4	....	....
West abutment, above State dam, Rome	8.15 a.m.	431.7	8.05 a.m.	431.5	8.20 a.m.	431.4	....	....
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, Rome	8.10 a.m.	432.2	7.45 a.m.	431.8	7.55 a.m.	431.8	....	....
North wing, west abutment, East Dominick street bridge, Rome	8.05 a.m.	432.5	7.40 a.m.	431.9	7.50 a.m.	431.9	....	....
South wing, east abutment, Floyd avenue bridge, Rome	7.50 a.m.	446.9	7.30 a.m.	446.6	7.40 a.m.	446.6	....	....

Table Showing Water-surface Elevations on Mohawk River between Utica and Rome —(Continued).

LOCATION.	SEPTEMBER 8, 1905.		SEPTEMBER 15, 1905.		SEPTEMBER 22, 1905.		SEPTEMBER 29, 1905.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
West end, north side of pier, Park avenue bridge, Utica.	1.45 p.m.	400.1	1.10 p.m.	396.2	12.20 p.m.	396.3	1.40 p.m.	394.7
East end, south side of pier, Genesee street bridge, Utica.	1.30 p.m.	400.4	12.55 p.m.	396.9	12.10 p.m.	397.5	1.30 p.m.	396.3
South wing, east abutment, Black River Division, N. Y. C. & H. R. R. R. bridge, Utica	12.45 p.m.	401.1	12.35 p.m.	397.0	11.55 a.m.	397.8	1.10 p.m.	396.3
West wing, south abutment, Schuyler street bridge, Utica	12.25 p.m.	401.5	12.05 p.m.	397.4	11.25 a.m.	398.1	12.40 p.m.	396.6
West wing, north abutment, Whitesboro–Marcy road bridge	11.40 a.m.	404.3	11.20 a.m.	399.3	10.50 a.m.	400.4	12.05 p.m.	398.0
East wing, south abutment, Carey's Crossing road bridge, Whitesboro	11.20 a.m.	405.9	10.55 a.m.	402.1	10.30 a.m.	403.0	11.40 a.m.	401.5
East wing, north abutment, Oriskany Dyke road bridge, Oriskany	10.45 a.m.	409.0	10.15 a.m.	406.7	10.00 a.m.	407.5	11.05 a.m.	406.3
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, 4 miles east of Rome	9.20 a.m.	418.0	9.10 a.m.	416.1	9.05 a.m.	417.6	9.55 a.m.	415.8
West wing, east abutment, Mill street bridge, Rome	8.40 a.m.	424.4	8.25 a.m.	423.3	8.30 a.m.	424.3	9.15 a.m.	423.5
West abutment, below State dam, Rome	8.25 a.m.	429.3	8.15 a.m.	428.7	8.20 a.m.	429.2	9.00 a.m.	428.7
West abutment, above State dam, Rome	8.25 a.m.	431.9	8.15 a.m.	431.6	8.20 a.m.	431.9	9.00 a.m.	431.6
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, Rome	8.20 a.m.	432.5	7.55 a.m.	432.1	8.00 a.m.	432.5	8.30 a.m.	432.1
North wing, west abutment, East Dominick street bridge, Rome	8.15 a.m.	432.6	7.50 a.m.	432.2	7.55 a.m.	432.6	8.25 a.m.	432.2
South wing, east abutment, Floyd avenue bridge, Rome.	8.00 a.m.	447.2	7.40 a.m.	446.8	7.40 a.m.	447.1	8.10 a.m.	446.9

Table Showing Water-surface Elevations on Mohawk River between Utica and Rome —(Continued).

LOCATION.	OCTOBER 6, 1905.		OCTOBER 13, 1905.		OCTOBER 20, 1905.		OCTOBER 27, 1905.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
West end, north side of pier, Park avenue bridge, Utica	12.55 p.m.	394.6	12.45 p.m.	401.1	1.10 p.m.	400.7	12.35 p.m.	395.3
East end, south side of pier, Genesee street bridge, Utica	12.45 p.m.	396.1	12.30 p.m.	401.2	1.00 p.m.	401.0	12.25 p.m.	397.1
South wing, east abutment, Black River Division, N. Y. C. & H. R. R. R. bridge, Utica	12.25 p.m.	396.2	12.15 p.m.	401.9	12.45 p.m.	401.7	12.10 p.m.	397.2
West wing, south abutment, Schuyler street bridge, Utica	12.00 m.	396.5	11.55 a.m.	402.5	12.25 p.m.	402.3	11.55 a.m.	397.6
West wing, north abutment, Whitesboro–Marcy road bridge	11.25 a.m.	397.7	11.00 a.m.	406.6	11.40 a.m.	406.3	11.15 a.m.	399.0
East wing, south abutment, Carey's Crossing road bridge, Whitesboro	11.00 a.m.	401.1	10.30 a.m.	408.7	10.40 a.m.	408.5	10.40 a.m.	402.0
East wing, north abutment, Oriskany Dyke road bridge, Oriskany	10.25 a.m.	406.2	9.50 a.m.	412.4	9.45 a.m.	411.9	9.55 a.m.	406.9
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, 4 miles east of Rome	9.20 a.m.	415.3	9.00 a.m.	422.1	9.05 a.m.	420.5	9.05 a.m.	416.6
West wing, east abutment, Mill street bridge, Rome	8.40 a.m.	422.4	8.40 a.m.	427.6	8.35 a.m.	425.5	8.30 a.m.	423.9
West abutment, below State dam, Rome	8.30 a.m.	428.3	8.20 a.m.	430.5	8.15 a.m.	429.8	8.10 a.m.	429.0
West abutment, above State dam, Rome	8.30 a.m.	431.4	8.20 a.m.	432.7	8.15 a.m.	432.3	8.10 a.m.	431.8
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, Rome	8.00 a.m.	432.0	8.05 a.m.	433.8	8.00 a.m.	433.0	8.00 a.m.	432.2
North wing, west abutment, East Dominick street bridge, Rome	7.55 a.m.	432.2	8.00 a.m.	433.9	7.55 a.m.	433.0	7.55 a.m.	432.4
South wing, east abutment, Floyd avenue bridge, Rome	7.40 a.m.	446.8	7.40 a.m.	448.5	7.45 a.m.	447.6	7.40 a.m.	447.0

Table Showing Water-surface Elevations on Mohawk River between Utica and Rome —(Continued).

LOCATION.	NOVEMBER 3, 1905.		NOVEMBER 10, 1905.		NOVEMBER 17, 1905.		NOVEMBER 24, 1905.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
West end, north side of pier, Park avenue bridge, Utica.	12.55 p.m.	396.8	1.30 p.m.	397.7	1.30 p.m.	396.9	1.30 p.m.	395.6
East end, south side of pier, Genesee street bridge, Utica.	12.45 p.m.	398.1	1.15 p.m.	398.5	1.15 p.m.	397.9	1.20 p.m.	397.0
South wing, east abutment, Black River Division, N. Y. C. & H. R. R. R. bridge, Utica	12.25 p.m.	398.5	12.50 p.m.	399.1	12.45 p.m.	398.3	12.50 p.m.	397.3
West wing, south abutment, Schuyler street bridge, Utica	12.05 p.m.	398.9	12.35 p.m.	399.6	12.35 p.m.	398.7	12.40 p.m.	397.7
West wing, north abutment, Whitesboro–Marcy road bridge	11.20 a.m.	401.4	11.45 a.m.	402.6	11.45 a.m.	401.4	11.45 a.m.	399.6
East wing, south abutment, Carey's Crossing road bridge, Whitesboro	10.40 a.m.	404.0	11.10 a.m.	405.0	11.20 a.m.	404.0	11.20 a.m.	402.9
East wing, north abutment, Oriskany Dyke road bridge, Oriskany	9.50 a m.	408.5	10.20 a.m.	409.3	10.30 a.m.	408.4	10.20 a.m.	407.4
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, 4 miles east of Rome	9.00 a.m.	418.2	9.30 a.m.	419.4	9.40 a.m.	418.9	9.30 a.m.	418.4
West wing, east abutment, Mill street bridge, Rome	8.30 a.m.	424.6	8.55 a.m.	425.1	9.05 a.m.	424.8	8.55 a.m.	424.3
West abutment, below State dam, Rome	8.10 a.m.	429.3	8.40 a.m.	429.6	8.45 a.m.	429.4	8.40 a.m.	429.2
West abutment, above State dam, Rome	8.10 a.m	431.9	8.40 a.m.	432.1	8.45 a.m.	432.0	8.40 a.m.	431.8
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, Rome	8.00 a.m.	432.6	8.30 a.m.	432.8	8.35 a.m.	432.6	8.30 a.m.	432.3
North wing, west abutment, East Dominick street bridge, Rome	7.55 a m.	432.8	8.20 a.m.	432.9	8.30 a.m.	432.7	8.25 a.m.	432.5
South wing, east abutment, Floyd avenue bridge, Rome.	7.40 a.m.	447.4	8.10 a.m.	447.6	8.10 a.m.	447.3	8.10 a.m.	447.1

Table Showing Water-surface Elevations on Mohawk River between Utica and Rome—(Continued).

LOCATION.	DECEMBER 1, 1905.		DECEMBER 8, 1905.		DECEMBER 15, 1905.		DECEMBER 22, 1905.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
West end, north side of pier, Park avenue bridge, Utica	1.05 p.m.	400.7	1.30 p.m.	397.7	10.20 a.m.	395.1	1.00 p.m.	402.0
East end, south side of pier, Genesee street bridge, Utica	12.50 a.m.	401.0	1.20 p.m.	398.9	10.30 a.m.	396.6	12.45 a.m.	402.5
South wing, east abutment, Black River Division, N. Y. C. & H. R. R. R. bridge, Utica	12.35 a.m.	401.7	1.00 p.m.	399.4	10.50 a.m.	396.7	12.25 a.m.	403.5
West wing south abutment, Schuyler street bridge, Utica	12.10 a.m.	402.2	12.40 p.m.	400.0	11.10 a.m.	397.0	12 05 a.m.	404.1
West wing, north abutment, Whitesboro-Marcy road bridge	11.25 a.m.	405.6	11.45 a.m.	402.8	12.35 p.m.	399.7	11.15 a.m.	408.6
East wing, south abutment, Carey's Crossing road bridge, Whitesboro	10.45 a.m.	407.4	11.15 a.m.	405.1	1.05 p.m.	402.3	10.40 a.m.	411.8
East wing, north abutment, Oriskany Dyke road bridge, Oriskany	9.50 a.m.	410.2	10.20 a.m.	408.9	1.55 p.m.	407.0	10.15 a.m.	417.0
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, 4 miles east of Rome	9.00 a.m.	419.0	9.30 a.m.	419.0	2.45 p.m.	417.8	9.30 a.m	425.4
West wing, east abutment, Mill street bridge, Rome	8.40 a.m.	424.7	9.00 a.m.	425.0	3.20 p.m.	424.4	8.55 a.m.	430.6
West abutment, below State dam, Rome	8.30 a.m.	429.6	8.40 a.m.	429.3	3.40 p.m.	429.1	8.40 a.m.	431.9
West abutment, above State dam, Rome	8.30 a.m.	432.0	8.40 a.m.	432.0	3.40 p.m.	431.8	8.40 a.m.	433.4
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, Rome	8.15 a.m.	432.5	8.35 a.m.	432.6	3.45 p.m.	432.3	8.35 a.m.	434.5
North wing, west abutment, East Dominick street bridge, Rome	8.10 a.m.	432.5	8.30 a.m.	432.7	3.55 p.m.	432.4	8.30 a.m.	434.6
South wing, east abutment, Floyd avenue bridge, Rome	8.00 a.m.	447.2	8.10 a.m.	447.2	4.10 p.m.	446.8	8.10 a.m.	449.1

Table Showing Water-surface Elevations on Mohawk River between Utica and Rome—(Continued).

LOCATION.	DECEMBER 29, 1905.		JANUARY 5, 1906.		JANUARY 12, 1906.		JANUARY 19, 1906.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
West end, north side of pier, Park avenue bridge, Utica	1.35 p.m.	397.3	1.20 p.m.	399.6	1.30 p.m.	396.5	1.25 p.m.	396.7
East end, south side of pier, Genesee street bridge, Utica	12.45 a.m.	398.3	1.10 a.m.	400.0	1.10 p.m.	397.3	1.10 p.m.	398.0
South wing, east abutment, Black River Division, N. Y. C. & H. R. R. R. bridge, Utica	12.25 a.m.	398.8	12.55 a.m.	401.0	1.00 p.m.	398.0	1.00 p.m.	398.4
West wing, south abutment, Schuyler street bridge, Utica	12.05 a.m.	399.2	12.35 a.m.	401.5	12.40 p.m.	398.9	12.40 p.m.	398.8
West wing, north abutment, Whitesboro-Marcy road bridge	11.10 a.m.	401.8	11.45 a.m.	405.8	11.45 a.m.	402.0	11.40 a.m.	401.9
East wing, south abutment, Carey's Crossing road bridge, Whitesboro	10.40 a.m.	404.3	11.10 a.m.	407.9	11.10 a.m.	406.4	11.10 a.m.	404.8
East wing, north abutment, Oriskany Dyke road bridge, Oriskany	9.50 a.m.	408.3	10.20 a.m.	411.3	10.20 a.m.	410.4	10.20 a.m.	409.4
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, 4 miles east of Rome	9.00 a.m.	418.4	9.30 a.m.	420.8	9.35 a.m.	418.5	9.30 a.m.	418.1
West wing, east abutment, Mill street bridge, Rome	8.20 a.m.	424.8	9.00 a.m.	426.3	8.55 a.m.	425.0	8.55 a.m.	424.4
West abutment, below State dam, Rome	8.00 a.m.	429.4	8.45 a.m.	430.0	8.40 a.m.	429.5	8.30 a.m.	429.3
West abutment, above State dam, Rome	8.00 a.m.	432.0	8.45 a.m.	432.4	8.40 a.m.	431.9	8.30 a.m.	432.0
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, Rome	7.55 a.m.	432.5	8.35 a.m.	433.2	8.30 a.m.	432.5	8.25 a.m.	432.3
North wing, west abutment, East Dominick street bridge, Rome	7.50 a.m.	432.7	8.30 a.m.	433.4	8.25 a.m.	432.7	8.20 a.m.	432.6
South wing, east abutment, Floyd avenue bridge, Rome	7.35 a.m.	447.1	8.10 a.m.	447.7	8.10 a.m.	447.3	8.10 a.m.	447.0

Table Showing Water-surface Elevations on Mohawk River between Utica and Rome —(Continued).

LOCATION.	JANUARY 26, 1906.		FEBRUARY 2, 1906.		FEBRUARY 9, 1906.		FEBRUARY 16, 1906.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
West end, north side of pier, Park avenue bridge, Utica	1.30 p.m.	401.7	1.30 p.m.	396.0	1.30 p.m.	395.5	1.30 p.m.	395.0
East end, south side of pier, Genesee street bridge, Utica	1.10 p.m.	402.0	1.10 p.m.	397.4	1.10 p.m.	396.7	1.15 p.m.	396.4
South wing, east abutment, Black River Division, N. Y. C. & H. R. R. R. bridge, Utica	12.55 p.m.	402.6	12.55 p.m.	398.0	12.55 p.m.	397.0	12.55 p.m.	396.7
West wing, south abutment, Schuyler street bridge, Utica	12.40 p.m.	403.1	12.40 p.m.	398.5	12.40 p.m.	397.5	12.40 p.m.	397.1
West wing, north abutment, Whitesboro-Marcy road bridge	11.50 a.m.	405.9	11.50 a.m.	401.3	11.50 a.m.	399.8	11.50 a.m.	399.2
East wing, south abutment, Carey's Crossing road bridge, Whitesboro	11.10 a.m.	407.6	11.05 a.m.	403.5	11.05 a.m.	403.2	11.05 a.m.	402.4
East wing, north abutment, Oriskany Dyke road bridge, Oriskany	10.20 a.m.	410.4	10.20 a.m.	407.5	10.25 a.m.	407.4	10.20 a.m.	406.9
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, 4 miles east of Rome	9.30 a.m.	420.4	9.30 a.m.	417.8	9.30 a.m.	418.4	9.30 a.m.	418.0
West wing, east abutment, Mill street bridge, Rome	8.55 a.m.	425.8	8.55 a.m.	424.5	9.00 a.m.	425.2	9.00 a.m.	424.5
West abutment, below State dam, Rome	8.40 a.m.	429.9	8.40 a.m.	429.2	8.40 a.m.	429.5	8.40 a.m.	429.1
West abutment, above State dam, Rome	8.40 a.m.	432.2	8.40 a.m.	431.9	8.40 a.m.	432.2	8.40 a.m.	432.2
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, Rome	8.25 a.m.	432.9	8.25 a.m.	432.2	8.25 a.m.	432.5	8.25 a.m.	432.7
North wing, west abutment, East Dominick street bridge, Rome	8.20 a.m.	433.0	8.20 a.m.	432.4	8.20 a.m.	432.7	8.20 a.m.	432.8
South wing, east abutment, Floyd avenue bridge, Rome	8.10 a.m.	447.6	8.10 a.m.	447.7	8.10 a.m.	446.9	8.10 a.m.	446.9

Table Showing Water-surface Elevations on Mohawk River between Utica and Rome—(Continued).

LOCATION.	FEBRUARY 23, 1906.		MARCH 2, 1906.		MARCH 9, 1906.		MARCH 16, 1906.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
West end, north side of pier, Park avenue bridge, Utica.	1.30 p.m.	400.9	1.30 p.m.	395.4	1.45 p.m.	396.0	12.50 p.m.	394.7
East end, south side of pier, Genesee street bridge, Utica.	1.15 p.m.	401.2	1.15 p.m.	396.6	1.30 p.m.	397.2	12.30 p.m.	396.2
South wing, east abutment, Black River Division, N. Y. C. & H. R. R. R. bridge, Utica	1.00 p.m.	402.0	1.00 p.m.	396.9	11.40 a.m.	397.6	12.10 p.m.	396.4
West wing, south abutment, Schuyler street bridge, Utica	12.45 p.m.	402.4	12.55 p.m.	397.3	11.25 a.m.	398.0	11.55 a.m.	396.7
West wing, north abutment, Whitesboro–Marcy road bridge	11.50 a.m.	404.9	11.50 a.m.	399.9	10.40 a.m.	400.3	11.15 a.m.	399.1
East wing, south abutment, Carey's Crossing road bridge, Whitesboro	11.10 a.m.	409.8	11.10 a.m.	403.2	10.15 a.m.	403.1	10.45 a.m.	401.6
East wing, north abutment, Oriskany Dyke road bridge, Oriskany	10.20 a.m.	413.9	10.20 a.m.	408.9	9.45 a.m.	407.7	10.15 a.m.	406.6
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, 4 miles east of Rome	9.30 a.m.	421.8	9.30 a.m.	417.8	9.00 a.m.	417.9	9.35 a.m.	416.6
West wing, east abutment, Mill street bridge, Rome	9.00 a.m.	426.0	9.00 a.m.	424.6	8.25 a.m.	424.5	8.55 a.m.	423.7
West abutment, below State dam, Rome	8.40 a.m.	429.8	8.40 a.m.	429.1	8.10 a.m.	429.4	8.35 a.m.	428.9
West abutment, above State dam, Rome	8.40 a.m.	432.3	8.40 a.m.	432.2	8.10 a.m.	431.9	8.35 a.m.	431.6
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, Rome	8.25 a.m.	432.8	8.25 a.m.	432.2	8.00 a.m.	432.4	8.30 a.m.	431.9
North wing, west abutment, East Dominick street bridge, Rome	8.20 a.m.	433.0	8.20 a.m.	432.3	7.55 a.m.	432.6	8.25 a.m.	432.1
South wing, east abutment, Floyd avenue bridge, Rome.	8.10 a.m.	447.0	8.10 a.m.	446.9	7.40 a.m.	447.0	8.10 a.m.	446.6

Table Showing Water-surface Elevations on Mohawk River between Utica and Rome — (Continued).

LOCATION.	MARCH 23, 1906.		MARCH 30, 1906.		APRIL 6, 1906.		APRIL 13, 1906.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
West end, north side of pier, Park avenue bridge, Utica	1.40 p.m.	394.3	1.00 p.m.	401.9	12.50 p.m.	400.3	12.45 p.m.	400.8
East end, south side of pier, Genesee street bridge, Utica	1.25 p.m.	395.8	12.45 p.m.	402.1	12.30 p.m.	400.6	12.25 p.m.	401.1
South wing, east abutment, Black River Division, N. Y. C. & H. R. R. R. bridge, Utica	12.25 p.m.	395.9	12.20 p.m.	402.9	12.10 p.m.	401.3	12.10 p.m.	401.9
West wing, south abutment, Schuyler street bridge, Utica	12.00 p.m.	396.3	12.00 p.m.	403.5	11.50 a.m.	401.8	11.50 p.m.	402.4
West wing, north abutment, Whitesboro–Marcy road bridge	11.15 a.m.	398.3	11.15 a.m.	407.2	11.15 a.m.	405.6	11.15 p.m.	406.5
East wing, south abutment, Carey's Crossing road bridge, Whitesboro	10.50 a.m.	401.8	10.45 a.m.	409.1	10.45 a.m.	407.4	10.40 p.m.	408.6
East wing, north abutment, Oriskany Dyke road bridge, Oriskany	10.15 a.m.	406.2	10.15 a.m.	412.4	10.15 a.m.	410.8	9.50 p.m.	412.4
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, 4 miles east of Rome	9.35 a.m.	416.8	9.30 a.m.	421.2	9.30 a.m.	419.8	9.00 p.m.	421.8
Stanwix; new gage, short distance below Whitehall creek	....	....	....	....	....	....	8.35 p.m.	424.9
West wing, east abutment, Mill street bridge, Rome	9.10 a.m.	423.7	8.55 a.m.	426.1	8.55 a.m.	425.3	8.20 p.m.	426.7
West abutment, below State dam, Rome	8.55 a.m.	429.0	8.40 a.m.	430.0	8.40 a.m.	429.8	8.05 p.m.	430.2
West abutment, above State dam, Rome	8.55 a.m.	431.6	8.40 a.m.	432.4	8.40 a.m.	432.2	8.05 p.m.	432.5
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, Rome	8.40 a.m.	432.0	8.30 a.m.	433.1	8.30 a.m.	432.8	7.55 p.m.	433.3
North wing, west abutment, East Dominick street bridge, Rome	8.30 a.m.	432.3	8.30 a.m.	433.2	8.30 a.m.	432.9	7.50 p.m.	433.5
South wing, east abutment, Floyd avenue bridge, Rome	8.10 a.m.	446.9	8.10 a.m.	447.7	8.15 a.m.	447.4	7.40 p.m.	447.9

Table Showing Water-surface Elevations on Mohawk River between Utica and Rome —(Continued).

LOCATION.	APRIL 20, 1906.		APRIL 27, 1906.		MAY 4, 1906.		MAY 11, 1906.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time	Elevation of water.	Time.	Elevation of water.
West end, north side of pier, Park avenue bridge, Utica.	12.35 p.m.	396.8	12.20 p.m.	395.2	12.45 p.m.	397.2	12.30 p.m.	394.8
East end, south side of pier, Genesee street bridge, Utica.	12.20 p.m.	398.2	12.05 p.m.	396.7	12.25 p.m.	398.4	12.15 p.m.	396.4
South wing, east abutment, Black River Division, N. Y. C. & H. R. R. R. bridge, Utica	12.05 p.m.	398.6	11.50 p.m.	397.0	12.05 p.m.	398.9	12.00 m.	396.6
West wing, south abutment, Schuyler street bridge, Utica	11.50 a.m.	399.0	11.35 a.m.	397.0	11.50 a.m.	399.3	11.50 a.m.	396.9
West wing, north abutment, Whitesboro-Marcy road bridge	11.10 a.m.	401.9	11.00 a.m.	399.1	11.20 a.m.	401.9	11.15 a.m.	398.4
East wing, south abutment, Carey's Crossing road bridge, Whitesboro	10.45 a.m.	404.1	10.40 a.m.	401.8	10.45 a.m.	403.9	10.45 a.m.	401.4
East wing, north abutment, Oriskany Dyke road bridge, Oriskany	10.15 a.m.	408.5	10.15 a.m.	406.4	10.15 a.m.	407.8	9.50 a.m.	406.0
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, 4 miles east of Rome	9.35 a.m.	419.7	9.30 a.m.	415.9	9.35 a.m.	416.8	9.00 a.m.	414.7
Stanwix; new gage, short distance below Whitehall creek	9.00 a.m.	422.2	8.55 a.m.	419.1	9.05 a.m.	419.9	8.35 a.m.	417.7
West wing, east abutment, Mill street bridge, Rome	8.45 a.m.	425.0	8.45 a.m.	423.1	8.50 a.m.	423.5	8.20 a.m.	422.5
West abutment, below State dam, Rome	8.35 a.m.	429.6	8.35 a.m.	428.6	8.35 a.m.	428.9	8.05 a.m.	428.0
West abutment, above State dam, Rome	8.35 a.m.	432.1	8.35 a.m.	431.5	8.35 a.m.	431.6	8.05 a.m.	430.5
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, Rome	8.25 a.m.	432.6	8.25 a.m.	432.0	8.30 a.m.	432.3	7.55 a.m.	431.8
North wing, west abutment, East Dominick street bridge, Rome	8.20 a.m.	432.8	8.25 a.m.	432.2	8.25 a.m.	432.5	7.50 a.m.	432.0
South wing, east abutment, Floyd avenue bridge, Rome.	8.10 a.m.	447.3	8.10 a.m.	446.7	8.10 a.m.	447.1	7.40 a.m.	446.8

Table Showing Water-surface Elevations on Mohawk River between Utica and Rome —(Continued).

LOCATION.	MAY 18, 1906.		MAY 25, 1906.		JUNE 1, 1906.		JUNE 8, 1906.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
West end, north side of pier, Park avenue bridge, Utica.	12.30 p.m.	394.6	12.25 p.m.	394.1	12.00 p.m.	394.3	12.45 p.m.	394.2
East end, south side of pier, Genesee street bridge, Utica.	12.20 p.m.	396.1	12.10 p.m.	395.7	11.45 a.m.	395.8	12.35 p.m.	395.5
South wing, east abutment, Black River Division, N. Y. C. & H. R. R. R. bridge, Utica	12.05 p.m.	396.2	11.50 a.m.	395.7	11.30 a.m.	395.9	12.15 p.m.	395.6
West wing, south abutment, Schuyler street bridge, Utica	11.50 a.m.	396.5	11.40 a.m.	395.9	11.15 a.m.	396.1	12.05 p.m.	395.9
West wing, north abutment, Whitesboro-Marcy road bridge	11.15 a.m	397.8	11.00 a.m.	396.5	10.40 a.m.	397.1	11.25 a.m.	396.8
East wing, south abutment, Carey's Crossing road bridge, Whitesboro	10.45 a.m.	401.0	10.40 a.m.	399.8	10.00 a.m.	400.5	10.40 a.m.	400.2
East wing, north abutment, Oriskany Dyke road bridge, Oriskany	10.15 a.m.	405.9	10.15 a.m.	405.6	9.20 a.m.	405.6	10.15 a.m.	405.6
North wing, east abutment, N. Y. C. & H. R. R. R. bridge 4 miles east of Rome	9.30 a.m.	414.7	9.30 a.m.	414.5	8.45 a.m.	414.5	9.30 a.m.	414.5
Stanwix; new gage, short distance below Whitehall creek	9.00 a.m.	417.9	9.00 a.m.	417.5	8.30 a.m.	417.5	9.05 a.m.	417.5
West wing, east abutment, Mill street bridge, Rome	8.45 a.m.	422.4	8.45 a.m.	422.5	8,15 a.m.	422.5	8.45 a.m.	422.5
West abutment, below State dam, Rome	8.35 a.m.	427.9	8.35 a.m.	427.9	8.05 a.m.	427.9	8.35 a.m.	427.9
West abutment, above State dam, Rome	8.35 a.m.	429.7	8.35 a.m.	429.3	8.05 a.m.	429.2	8.35 a.m.	429.3
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, Rome	8.25 a.m.	431.6	8.25 a.m.	431.4	7.55 a.m.	431.4	8.25 a.m.	431.4
North wing, west abutment, East Dominick street bridge, Rome	8.25 a.m.	431.8	8.20 a.m.	431.4	7.50 a.m.	431.4	8.25 a.m.	431.5
South wing, east abutment, Floyd avenue bridge, Rome.	8.10 a.m.	446.6	8.10 a.m.	446.4	7.40 a.m.	446.4	8.10 a.m.	446.4

Table Showing Water-surface Elevations on Mohawk River between Utica and Rome—(Continued).

LOCATION.	JUNE 15, 1906.		JUNE 22, 1906.		JUNE 29, 1906.		JULY 6, 1906.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
West end, north side of pier, Park avenue bridge, Utica.	12.15 p.m.	394.1	12.10 p.m.	394.2	12.45 p.m.	394.1	12.45 p.m.	394.6
East end, south side of pier, Genesee street bridge, Utica.	12.00 m.	395.3	11.55 a.m.	395.6	12.30 p.m.	395.1	12.30 p.m.	395.9
South wing, east abutment, Black River Division, N. Y. C. & H. R. R. R. bridge, Utica	11.45 a.m.	395.4	11.40 a.m.	395.7	12.15 p.m.	395.1	12.15 p.m.	396.1
West wing, south abutment, Schuyler street bridge, Utica	11.30 a.m.	395.7	11.30 a.m.	396.0	12.00 m.	395.6	12.00 m.	396.5
West wing, north abutment, Whitesboro–Marcy road bridge	10.45 a.m.	396.5	10.35 a.m.	396.9	11.20 a.m.	396.6	11.20 a.m.	397.7
East wing, south abutment, Carey's Crossing road bridge, Whitesboro	10.15 a.m.	400.1	10.15 a.m.	400.4	10.40 a.m.	400.1	10.15 a.m.	400.9
East wing, north abutment, Oriskany Dyke road bridge, Oriskany	9.45 a.m.	405.5	9.45 a.m.	405.6	9.45 a.m.	405.5	9.45 a.m.	406.2
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, 4 miles east of Rome	9.00 a.m.	414.5	9.00 a.m.	414.6	9.00 a.m.	414.5	9.00 a.m.	415.6
Stanwix; new gage, short distance below Whitehall creek	8.30 a.m.	417.5	8.30 a.m.	417.5	8.40 a.m.	417.5	8.40 a.m.	418.1
West wing, east abutment, Mill street bridge, Rome	8.15 a.m.	422.5	8.15 a.m.	422.5	8.20 a.m.	422.4	8.20 a.m.	423.0
West abutment, below State dam, Rome	8.05 a.m.	428.1	8.05 a.m.	428.1	8.10 a.m.	428.0	8.05 a.m.	428.6
West abutment, above State dam, Rome	8.05 a.m.	430.6	8.05 a.m.	430.7	8.10 a.m.	430.4	8.05 a.m.	431.5
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, Rome	7.55 a.m.	431.6	7.55 a.m.	431.7	8.00 a.m.	431.6	7.55 a.m.	431.8
North wing, west abutment, East Dominick street bridge, Rome	7.50 a.m.	431.6	7.50 a.m.	431.7	7.55 a.m.	431.6	7.50 a.m.	431.8
South wing, east abutment, Floyd avenue bridge, Rome.	7.40 a.m.	446.5	7.40 a.m.	446.6	7.40 a.m.	446.6	7.40 a.m.	446.8

Table Showing Water-surface Elevations on Mohawk River between Utica and Rome — (Continued).

LOCATION.	JULY 13, 1906.		JULY 20, 1906.		JULY 27, 1906.		AUGUST 3, 1906.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
West end, north side of pier. Park avenue bridge, Utica.	12.45 p.m.	395.1	12.45 p.m.	394.0	12.45 p.m.	394.0	12.45 p.m.	394.0
East end, south side of pier, Genesee street bridge, Utica.	12.30 p.m.	396.5	12.30 p.m.	395.2	12.30 p.m.	395.1	12.30 p.m.	395.1
South wing, east abutment, Black River Division, N. Y. C. & H. R. R. R. bridge, Utica	12.15 p.m.	396.6	12.15 p.m.	395.3	12.15 p.m.	395.1	12.15 p.m.	395.1
West wing, south abutment, Schuyler street bridge, Utica	12.00 m.	397.0	12.00 m.	393.7	12.00 m.	395.5	12.00 m.	395.5
West wing, north abutment, Whitesboro-Marcy road bridge	11.20 a.m.	398.0	11.20 a.m.	396.5	11.20 a.m.	396.5	11 20 a.m.	396.5
East wing, south abutment, Carey's Crossing road bridge, Whitesboro	10.40 a.m.	401.5	10.40 a.m.	400.1	10.40 a.m.	400.1	10.40 a m.	400.1
East wing, north abutment, Oriskany Dyke road bridge, Oriskany	9.50 a.m.	406.6	9.50 a.m.	405.5	9.45 a.m.	400.5	9.45 a.m.	404.5
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, 4 miles east of Rome	9.00 a.m.	416.0	9.00 a.m.	414.5	9.00 a.m.	414.5	9.00 a.m.	414.5
Stanwix; new gage, short distance below Whitehall creek	8.40 a.m.	418.4	8.40 a.m.	417.5	8.30 a.m.	417.5	8.30 a.m.	417.5
West wing, east abutment, Mill street bridge, Rome	8.20 a.m.	423.4	8.20 a.m.	422.4	8.20 a.m.	422.4	8.20 a.m.	422.4
West abutment, below State dam, Rome	8.10 a.m.	429.0	8.10 a.m.	428.0	8.10 a.m.	427.9	8.10 a.m.	428.2
West abutment, above State dam, Rome	8.10 a.m.	431.7	8.10 a.m.	430.7	8.10 a.m.	429.3	8.10 a.m.	430.7
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, Rome	8.00 a.m.	432.0	8.00 a.m.	431.7	8.00 a.m.	431.4	8.00 a.m.	431.6
North wing, west abutment, East Dominick street bridge, Rome	7.55 a.m.	432.0	7.55 a.m.	431.7	7.55 a.m.	431.4	7.55 a.m.	431.6
South wing, east abutment, Floyd avenue bridge, Rome.	7.40 a.m.	447.0	7.40 a.m.	446.7	7.40 a.m.	446.5	7.40 a.m.	446.6

Table Showing Water-surface Elevations on Mohawk River between Utica and Rome—(Continued).

LOCATION.	AUGUST 10, 1906.		AUGUST 17, 1906.		AUGUST 24, 1906.		AUGUST 31, 1906.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
West end, north side of pier, Park avenue bridge, Utica			12.45 p.m.	394.0	12.45 p.m.	393.9	12.45 p.m.	393.7
East end, south side of pier, Genesee street bridge, Utica			12.30 p.m.	395.1	12.30 p.m.	395.0	12.30 p.m.	394.7
South wing, east abutment, Black River Division, N. Y. C. & H. R. R. R. bridge, Utica			12.15 p.m.	395.1	12.15 p.m.	395.0	12.15 p.m.	394.7
West wing, south abutment, Schuyler street bridge, Utica			12.00 m.	395.5	12.00 m.	395.4	12.00 m.	395.2
West wing, north abutment, Whitesboro–Marcy road bridge			11.20 a.m.	396.5	11.20 a.m.	396.4	11.20 a.m.	396.2
East wing, south abutment, Carey's Crossing road bridge, Whitesboro			10.40 a.m.	400.1	10.40 a.m.	400.0	10.40 a.m.	399.8
East wing, north abutment, Oriskany Dyke road bridge, Oriskany			9.45 a.m.	405.5	9.45 a.m.	405.4	9.45 a.m.	405.3
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, 4 miles east of Rome			8.30 a.m.	414.5	9.00 a.m.	414.4	9.00 a.m.	414.4
Stanwix; new gage, short distance below Whitehall creek			8.05 a.m.	417.5	8.30 a.m.	417.5	8.30 a.m.	417.5
West wing, east abutment, Mill street bridge, Rome			7.45 a.m.	422.4	8.20 a.m.	422.4	8.20 a.m.	422.4
West abutment, below State dam, Rome			7.30 a.m.	428.0	8.10 a.m.	428.0	8.10 a.m.	428.0
West abutment, above State dam, Rome			7.30 a.m.	430.7	8.10 a.m.	430.0	8.10 a.m.	430.0
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, Rome			7.20 a.m.	431.6	8.00 a.m.	431.4	8.00 a.m.	431.4
North wing, west abutment, East Dominick street bridge, Rome			7.15 a.m.	431.6	7.55 a.m.	431.4	7.55 a.m.	431.4
South wing, east abutment, Floyd avenue bridge, Rome			7.05 a.m.	446.6	7.40 a.m.	446.5	7.40 a.m.	446.5

Table Showing Water-surface Elevations on Mohawk River between Utica and Rome —(Continued).

LOCATION.	SEPTEMBER 7, 1906.		SEPTEMBER 14, 1906.		SEPTEMBER 21, 1906.		SEPTEMBER 28, 1906.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
West end, north side of pier, Park avenue bridge, Utica	12.45 p.m.	393.7	12.45 p.m.	393.7	11.50 a.m.	393.7	12.45 p.m.	393.7
East end, south side of pier, Genesee street bridge, Utica	12.30 p.m.	394.6	12.30 p.m.	394.5	11.35 a.m.	394.5	12.30 p.m.	394.6
South wing, east abutment, Black River Division, N. Y. C. & H. R. R. R. bridge, Utica	12.15 p.m.	394.6	12.15 p.m.	394.5	11.20 a.m.	394.6	12.15 p.m.	394.6
West wing, south abutment Schuyler street bridge, Utica	12.00 m.	395.2	12.00 m.	395.2	11.00 a.m.	395.5	12.00 m.	395.2
West wing, north abutment, Whitesboro-Marcy road bridge	11.20 a.m.	396.1	11.20 a.m.	396.1	10.15 a.m.	396.2	11.20 a.m.	396.1
East wing, south abutment, Carey's Crossing road bridge, Whitesboro	10.40 a.m.	399.7	10.40 a.m.	399.7	9.40 a.m.	399.8	10.40 a.m.	399.7
East wing, north abutment, Oriskany Dyke road bridge, Oriskany	9.45 a.m.	405.3	9.45 a.m.	405.3	9.15 a.m.	405.4	9.45 a.m.	405.4
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, 4 miles east of Rome	9.00 a.m.	414.4	9.00 a.m.	414.4	8.30 a.m.	414.5	9.00 a.m.	414.4
Stanwix; new gage, short distance below Whitehall creek	8.30 a.m.	417.5	8.30 a.m.	417.5	8.00 a.m.	417.5	8 30 a.m.	417.5
West wing, east abutment, Mill street bridge, Rome	8.20 a.m.	422.4	8.20 a.m.	422.4	7.40 a.m.	422.5	8.20 a.m.	422.4
West abutment, below State dam, Rome	8.10 a m.	427.9	8.10 a.m.	427.9	7.25 a.m.	428.0	8.10 a.m.	428.0
West abutment, above State dam, Rome	8.10 a.m.	429.7	8.10 a.m.	429.7	7.25 a.m.	429.8	8.10 a.m.	429.8
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, Rome	8.10 a.m.	431.4	8.00 a.m.	431.4	7.20 a.m.	431.5	8.00 a.m.	431.5
North wing, west abutment, East Dominick street bridge, Rome	7.55 a.m.	431.4	7.55 a.m.	431.4	7.15 a.m.	431.5	7.55 a.m.	431.5
South wing, east abutment, Floyd avenue bridge, Rome	7.40 a.m.	446.5	7.40 a.m.	446.5	7.00 a.m.	446.7	7.40 a.m.	446.5

Table Showing Water-surface Elevations on Mohawk River between Utica and Rome—(Continued).

LOCATION.	OCTOBER 5, 1906.		OCTOBER 12, 1906.		OCTOBER 19, 1906.		OCTOBER 26, 1906.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
West end, north side of pier, Park avenue bridge, Utica.	12.45 p.m.	393.9	12.45 p.m.	395.1	12.45 p.m.	394.1	12.45 p.m.	395.0
East end, south side of pier, Genesee street bridge, Utica.	12.30 p.m.	394.8	12.30 p.m.	396.7	12.30 p.m.	394.8	12.30 p.m.	396.6
South wing, east abutment, Black River Division, N. Y. C. & H. R. R. R. bridge, Utica	12.15 p.m.	394.8	12.15 p.m.	396.7	12.15 p.m.	394.8	12.15 p.m.	396.6
West wing, south abutment, Schuyler street bridge, Utica	12.00 m.	395.4	12.00 m.	397.0	12.00 m.	395.4	12.00 m.	396.9
West wing, north abutment, Whitesboro-Marcy road bridge	11.20 a.m.	396.4	11.20 a.m.	398.0	11.20 a.m.	396.4	11.20 a.m.	397.9
East wing, south abutment, Carey's Crossing road bridge, Whitesboro	10.40 a.m.	399.9	10.40 a.m.	401.9	10.40 a.m.	400.0	10.40 a.m.	401.8
East wing, north abutment, Oriskany Dyke road bridge, Oriskany	9.45 a.m.	405.5	9.45 a.m.	406.9	9.45 a.m.	405.5	9.45 a.m.	406.8
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, 4 miles east of Rome	9.00 a.m.	414.5	9.00 a.m.	415.3	9.00 a.m.	414.6	9.00 a.m.	415.3
Stanwix; new gage, short distance below Whitehall creek	8.30 a.m.	417.5	8.30 a.m.	418.1	8.30 a.m.	417.5	8.30 a.m.	418.1
West wing, east abutment, Mill street bridge, Rome	8.20 a.m.	422.5	8.20 a.m.	423.3	8.20 a.m.	422.5	8.20 a.m.	423.3
West abutment, below State dam, Rome	8.10 a.m.	428.0	8.10 a.m.	428.8	8.10 a.m.	428.0	8.10 a.m.	428.8
West abutment, above State dam, Rome	8.10 a.m.	430.7	8.10 a.m.	431.6	8.10 a.m.	430.8	8.10 a.m.	431.6
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, Rome	8.00 a.m.	431.6	8.00 a.m.	432.0	8.00 a.m.	431.5	8.00 a.m.	432.0
North wing, west abutment, East Dominick street bridge, Rome	7.55 a.m.	431.6	7.55 a.m.	432.0	7.55 a.m.	431.5	7.55 a.m.	432.0
South wing, east abutment, Floyd avenue bridge, Rome.	7.40 a.m.	446.6	7.40 a.m.	447.0	7.40 a.m.	446.5	7.40 a m.	447.0

Table Showing Water-surface Elevations on Mohawk River between Utica and Rome—(Continued).

LOCATION.	NOVEMBER 2, 1906.		NOVEMBER 9, 1906.		NOVEMBER 16, 1906.		NOVEMBER 23, 1906.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
West end, north side of pier, Park avenue bridge, Utica.	12.45 p.m.	394.2	12.45 p.m.	394.1	12.45 p.m.	395.0	12.45 p.m.	396.5
East end, south side of pier, Genesee street bridge, Utica	12.30 p.m.	395.8	12.30 p.m.	394.8	12.30 p.m.	396.6	12.30 p.m.	398.3
South wing, east abutment, Black River Division, N. Y. C. & H. R. R. R. bridge, Utica	12.15 p.m.	395.8	12.15 p.m.	394.8	12.15 p.m.	396.6	12.15 p.m.	398.3
West wing, south abutment, Schuyler street bridge, Utica	12.00 m.	396.1	12.00 m.	395.5	12.00 m.	396.9	12.00 m.	398.6
West wing, north abutment, Whitesboro-Marcy road bridge	11.20 a.m.	397.1	11.20 a.m.	396.5	11.20 a.m.	397.9	11.20 a.m.	399.6
East wing, south abutment, Carey's Crossing road bridge, Whitesboro	10.40 a.m.	401.0	10.40 a.m.	400.0	10.40 a.m.	401.8	10.40 a.m.	403.3
East wing, north abutment, Oriskany Dyke road bridge, Oriskany	9.45 a.m.	406.0	9.45 a.m.	405.5	9.45 a.m.	406.8	9.45 a.m.	407.8
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, 4 miles east of Rome	9.00 a.m.	414.9	9.00 a.m.	414.5	9.00 a.m.	415.3	9.00 a.m.	416.5
Stanwix; new gage, short distance below Whitehall creek	8.30 a.m.	417.5	8.30 a.m.	417.5	8.30 a.m.	418.1	8.30 a.m.	418.6
West wing, east abutment, Mill street bridge, Rome	8.20 a.m.	422.7	8.20 a.m.	422.5	8.20 a.m.	423.3	8.20 a.m.	424.3
West abutment, below State dam, Rome	8.10 a.m.	428.4	8.10 a.m.	428.0	8.10 a.m.	428.8	8.10 a.m.	429.2
West abutment, above State dam, Rome	8.10 a.m.	431.4	8.10 a.m.	430.1	8.10 a.m.	431.6	8.10 a.m.	431.9
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, Rome	8.00 a.m.	431.8	8.00 a.m.	431.5	8.00 a.m.	432.0	8.00 a.m.	432.4
North wing, west abutment, East Dominick street bridge, Rome	7.55 a.m.	431.8	7.55 a.m.	431.5	7.55 a.m.	432.0	7.55 a.m.	432.4
South wing, east abutment, Floyd avenue bridge, Rome.	7.40 a.m.	446.8	7.40 a.m.	446.5	7.40 a.m.	447.0	7.40 a.m.	447.4

Table Showing Water-surface Elevations on Mohawk River between Utica and Rome —(Concluded).

LOCATION.	NOVEMBER 30. 1906.		DECEMBER 7, 1906.		DECEMBER 14, 1906.		DECEMBER 21, 1906.		DECEMBER 28, 1906.	
	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.	Time.	Elevation of water.
West end, north side of pier, Park avenue bridge, Utica.........	12.45 p.m.	396.0	12.45 p.m.	398.3	12.45 p.m.	396.1	12.45 p.m.	396.5	12.45 p.m.	395.2
East end, south side of pier, Genesee street bridge, Utica.......	12.30 p.m.	397.9	12.30 p.m.	400.2	12.30 p.m.	397.7	12.30 p.m.	398.2	12.30 p.m.	396.8
South wing, east abutment, Black River Division, N. Y. C. & H. R. R. R. bridge, Utica.......	12.15 p.m.	397.9	12.15 p.m	401.2	12.15 p.m.	398.1	12.15 p.m.	398.6	12.15 p.m.	396.8
West wing, south abutment, Schuyler street bridge, Utica..	12.00 m.	398.3	12.00 m.	401.4	12.00 m.	399.3	12.00 m.	399.8	12.00 m.	397.1
West wing, north abutment, Whitesboro-Marcy road bridge	11.20 a.m.	399.3	11.20 a.m.	405.4	11.20 a.m.	400.3	11.20 a.m.	400.8	11.20 a.m.	399.3
East wing, south abutment, Carey's Crossing road bridge, Whitesboro	10.40 a.m.	403.0	10.40 a.m.	409.0	10.40 a.m.	403.8	10.40 a.m.	404.3	10.40 a.m.	403.0
East wing, north abutment, Oriskany Dyke road b'ge, Oriskany	9.45 a.m.	407.5	9.45 a.m.	413.5	9.45 a.m.	407.7	9.45 a.m.	408.4	9.45 a.m.	407.3
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, 4 miles east of Rome........	9.00 a.m.	416.3	9.00 a.m.	420.1	9.00 a.m.	417.8	9.00 a.m.	418.0	9.00 a.m.	417.2
Stanwix; new gage, short distance below Whitehall creek........	8.30 a.m.	418.5	8.30 a.m.	423.0	8.30 a.m.	421.5	8.30 a.m.	422.5	....	....
West wing, east abutment, Mill street bridge, Rome..........	8.20 a.m	424.1	8.20 a.m.	425.3	8.20 a.m.	424.7	8.20 a.m.	425.2	8.20 a.m.	424.9
West abutment, below State dam Rome....................	8.10 a.m.	429.1	8.10 a.m.	429.6	8.10 a.m.	429.0	8.10 a.m.	429.2	8.10 a.m.	428.9
West abutment, above State dam, Rome.................	8.10 a.m.	431.8	8.10 a.m.	432.3	8.10 a.m.	431.9	8.10 a.m.	432.1	8.10 a.m.	431.7
North wing, east abutment, N. Y. C. & H. R. R. R. bridge, Rome	8.00 a.m.	432.3	8.00 a.m.	432.7	8.00 a.m.	432.1	8.00 a.m.	432.2	8.00 a.m.	431.8
North wing, west abutment, East Dominick street bridge, Rome	7.55 a.m.	432.3	7.55 a.m.	432.7	7.55 a.m	432.1	7.55 a.m.	432.2	7.55 a.m.	431.8
South wing, east abutment, Floyd avenue bridge, Rome.........	7.40 a.m.	447.3	7.40 a.m.	448.7	7.40 a.m.	447.0	7.40 a.m.	447.1	7.40 a.m.	446.8

Upper Hudson Basin.

HUDSON RIVER BELOW STATE DAM, TROY, N. Y.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River below State Dam at Troy, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	11.6	13.7	5.6	4.9	4.2	2.5	4.5	4.3	2.7
2	......	......	......	14.1	12.5	4.9	5.0	3.8	2.6	6.7	4.0	2.2
3	......	......	......	13.7	11.7	5.2	3.3	3.0	1.7	5.8	4.3	2.9
4	......	......	......	11.3	11.4	5.0	3.1	2.6	2.8	5.0	4.1	2.4
5	......	......	......	11.2	10.7	3.2	3.5	2.6	2.6	4.5	4.5	2.4
6	......	......	......	11.4	10.1	3.4	3.3	3.1	3.1	4.4	4.6	2.5
7	......	......	......	11.5	9.5	4.4	3.2	3.1	3.4	3.9	4.9	2.7
8	......	......	......	13.0	8.7	6.0	3.2	3.3	3.8	4.7	4.7	2.4
9	......	......	......	13.5	8.0	10.4	3.2	3.1	3.9	4.8	4.3	2.4
10	......	......	......	15.4	7.6	11.2	3.3	3.7	4.4	5.1	4.6	2.6
11	......	......	......	16.3	7.3	11.2	3.3	4.1	4.1	4.9	4.2	2.9
12	......	......	......	15.2	6.5	8.3	4.1	4.0	4.3	6.6	3.9	2.7
13	......	......	......	14.0	6.1	7.5	4.3	4.5	3.9	6.0	3.2	2.3
14	......	......	......	12.6	6.2	7.0	4.3	3.6	3.6	5.0	2.6	2.7
15	......	......	......	10.8	5.9	6.6	4.7	3.6	4.1	4.3	2.5	2.6
16	......	......	......	9.3	6.3	5.7	4.8	3.6	4.1	4.3	2.5	2.2
17	......	......	......	8.5	7.4	5.2	3.2	3.3	3.9	3.8	2.4	2.7
18	......	......	......	9.2	7.4	5.5	3.5	1.9	3.5	3.6	3.5	2.7
19	......	......	......	9.5	6.4	3.3	3.2	1.5	2.9	3.6	3.4	2.9
20	......	......	......	8.3	7.0	3.3	2.6	1.9	3.3	4.0	3.1	2.6
21	......	......	......	7.6	6.9	3.1	2.6	3.9	2.9	3.9	3.9	2.6
22	......	......	......	7.0	6.7	3.1	2.6	5.6	3.0	11.3	4.8	2.7
23	......	......	......	6.9	6.8	2.9	2.7	6.8	3.9	11.8	4.8	2.8
24	......	......	......	7.3	6.3	3.1	2.7	6.7	3.8	10.7	4.7	2.3
25	......	......	......	8.2	5.7	3.1	3.2	6.6	3.8	8.9	3.7	2.3
26	......	......	......	10.2	5.9	3.5	4.0	6.0	3.4	7.9	3.5	2.7
27	......	......	......	10.7	6.0	3.4	4.5	5.6	4.8	6.8	3.3	4.6
28	......	......	......	12.1	5.8	3.8	4.5	4.3	4.9	6.5	2.5	5.7
29	......	......	......	13.6	6.0	4.5	4.9	4.3	4.9	6.4	3.3	10.0
30	......	......	......	13.8	5.9	4.6	4.3	3.6	4.3	4.6	3.5	8.9
31	......	......	......	......	5.3	......	......	3.5	.....	5.2	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River below State Dam at Troy, N Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	8.8	3.3	3.4	15.4	6.1	4.0	7.4	3.4	4.2	4.3	3.2	4.4
2	7.6	3.1	3.3	17.7	5.4	4.0	6.8	3.3	4.2	4.0	3.3	5.0
3	7.4	3.4	3.3	18.0	5.3	4.0	7.2	3.4	4.5	4.1	3.3	6.5
4	6.8	3.5	3.2	17.4	5.0	3.0	6.8	4.0	5.2	4.3	3.1	7.2
5	6.9	3.7	3.4	15.8	4.8	3.7	5.6	3.0	5.6	4.8	3.0	7.3
6	6.0	3.6	3.1	14.8	4.9	4.1	5.8	3.6	5.6	5.1	3.2	6.6
7	7.0	3.2	3.8	14.5	4.9	3.7	4.4	3.2	6.3	4.3	3.3	6.2
8	8.8	3.4	4.3	13.9	4.4	4.4	3.6	3.4	5.8	4.5	3.6	6.7
9	9.3	3.3	3.8	13.8	4.6	4.4	3.5	4.0	5.8	4.1	3.6	6.7
10	7.8	3.3	3.2	13.7	4.4	5.7	3.9	4.9	5.7	5.1	3.4	6.0
11	5.9	3.1	3.7	12.8	4.9	3.7	3.5	3.6	6.0	5.2	3.2	5.7
12	5.7	3.0	3.6	13.9	4.6	3.2	3.5	3.3	4.4	4.8	4.0	5.3
13	5.7	2.6	3.8	12.9	5.0	4.2	3.8	3.3	4.8	4.8	4.5	4.3
14	6.5	2.3	3.3	12.8	4.7	3.6	3.5	3.7	4.1	5.1	3.9	5.0
15	6.5	2.8	3.9	12.0	4.6	3.0	3.6	3.7	4.1	4.8	4.2	4.9
16	6.0	3.1	3.4	10.7	4.7	3.1	3.6	3.9	4.4	5.0	4.8	4.7
17	5.4	2.8	3.0	10.6	4.2	2.7	3.5	4.3	4.6	5.0	5.0	5.0
18	5.2	3.3	3.9	9.9	4.4	6.9	3.4	3.9	4.4	4.9	4.6	5.5
19	6.0	3.3	6.1	9.3	4.5	6.5	3.4	3.8	4.7	4.6	4.4	5.6
20	5.2	3.0	6.8	9.2	4.5	5.8	4.1	3.6	5.2	4.2	4.9	5.6
21	5.4	2.8	6.8	7.2	4.8	6.8	3.7	4.6	5.7	4.0	5.1	5.5
22	4.8	2.8	6.8	7.0	5.0	7.5	3.3	3.8	5.1	3.6	5.1	5.3
23	5.2	3.5	7.3	7.1	4.4	8.6	3.1	3.7	4.8	3.2	4.7	5.4
24	4.5	3.3	8.9	7.3	4.9	9.2	3.9	3.0	4.8	3.4	4.8	5.2
25	3.8	3.1	9.1	6.4	4.3	8.9	3.3	3.8	4.8	3.9	5.0	5.3
26	3.9	3.4	15.7	6.3	5.1	6.1	3.3	3.2	4.7	3.2	4.6	5.2
27	3.8	3.5	14.3	6.4	3.7	8.1	3.2	3.2	4.8	3.5	4.6	5.1
28	3.2	3.2	14.7	5.7	2.8	8.2	3.6	4.1	4.5	3.3	4.2	4.5
29	3.4	......	15.4	5.5	2.9	8.0	3.2	2.7	4.2	3.0	4.3	4.2
30	3.1	......	15.2	5.8	3.0	8.0	3.7	3.6	4.4	3.5	3.8	4.2
31	3.4	......	14.4	......	3.8	......	3.4	3.8	......	3.6	......	4.3

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River below State Dam at Troy, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	4.78	6.93	7.68	9.48	6.83	4.83	4.03	3.23	3.73	2.88	3.23	4.98
2	5.43	6.98	7.38	8.83	7.43	5.03	4.23	3.43	4.43	2.73	3.53	4.78
3	4.88	6.37	7.23	7.68	6.98	5.93	4.08	3.38	4.93	2.83	4.03	4.92
4	4.98	6.08	7.43	7.73	7.43	5.53	3.88	3.38	4.78	2.28	3.53	4.38
5	4.78	5.93	7.83	7.83	7.33	5.88	4.23	3.38	4.68	2.83	3.93	4.18
6	4.93	5.68	7.78	8.18	7.83	5.53	4.03	2.93	4.13	2.93	3.48	4.48
7	4.43	5.48	7.83	7.88	7.73	5.33	4.28	3.18	4.18	3.03	3.13	4.18
8	4.28	5.93	7.43	8.28	7.08	5.53	4.03	3.18	3.88	2.68	3.68	4.33
9	4.18	5.53	7.23	8.18	7.33	5.88	3.18	3.28	3.88	2.78	3.48	4.08
10	4.43	5.38	7.28	8.38	6.88	5.83	3.38	3.53	3.93	2.93	3.68	3.88
11	4.73	5.83	6.93	8.48	6.23	5.58	3.23	3.53	3.34	2.93	4.23	4.48
12	4.88	5.73	6.83	8.08	6.83	5.53	3.23	3.33	4.03	2.88	3.73	4.88
13	4.28	5.43	7.13	8.53	5.18	5.58	3.68	3.13	3.68	2.78	3.93	4.78
14	5.03	5.13	6.78	8.83	5.83	5.93	3.58	3.38	3.83	2.93	3.68	4.43
15	4.83	5.18	6.58	11.83	5.73	5.58	3.78	3.18	3.98	3.03	3.48	4.58
16	5.28	5.28	6.53	12.18	5.43	5.43	3.48	2.43	3.93	2.78	4.03	4.28
17	5.03	4.83	6.85	12.60	4.93	5.23	3.33	1.83	3.78	2.48	4.18	4.53
18	5.13	4.78	6.38	13.93	4.93	5.43	3.23	1.08	3.73	2.83	4.13	4.33
19	4.53	4.53	5.18	13.58	5.03	5.18	3.33	0.53	3.63	2.98	4.13	4.53
20	4.78	5.03	5.23	11.10	4.68	5.08	3.33	0.78	3.38	2.93	3.98	4.88
21	4.03	5.28	4.78	9.31	4.73	4.93	3.33	1.83	3.33	3.18	3.93	4.68
22	4.73	5.53	4.83	7.88	4.93	4.73	3.63	2.33	2.88	3.28	3.78	4.73
23	4.63	5.83	3.68	7.83	5.03	4.43	3.43	2.38	3.03	3.08	3.93	4.58
24	5.63	10.38	3.43	7.33	4.78	4.43	3.23	2.83	2.88	3.13	3.93	4.48
25	6.28	8.33	3.88	7.38	4.68	4.23	3.53	3.28	2.73	2.88	5.33	3.68
26	7.28	8.68	5.23	7.38	4.88	4.03	3.33	3.03	2.88	3.28	5.28	3.78
27	8.03	8.43	6.13	6.98	5.03	3.83	3.53	3.08	2.53	3.63	5.28	3.58
28	8.58	6.98	6.38	6.53	4.83	4.23	3.53	3.53	2.98	3.83	4.83	3.38
29	8.13	......	6.43	6.28	5.18	4.83	3.63	3.28	2.48	3.98	4.38	3.53
30	7.88	......	7.88	6.78	5.63	3.68	3.68	3.08	2.08	3.33	5.13	3.28
31	7.38	......	9.08	......	5.58	......	3.53	3.33	......	3.33	......	4.08

HUDSON RIVER ABOVE STATE DAM, TROY, N. Y.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River above State Dam at Troy, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	......	......	......	......	......	......	16.0	15.0
2	......	......	......	......	......	......	......	......	......	......	15.8	15.1
3	......	......	......	......	......	......	......	......	......	......	15.9	14.6
4	......	......	......	......	......	......	......	......	......	......	15.7	14.5
5	......	......	......	......	......	......	......	......	......	......	15.6	14.5
6	......	......	......	......	......	......	......	......	......	......	......	14.7
7	......	......	......	......	......	......	......	......	......	......	15.7	14.6
8	......	......	......	......	......	......	......	......	......	......	15.5	14.5
9	......	......	......	......	......	......	......	......	......	......	15.5	14.5
10	......	......	......	......	......	......	......	......	......	......	15.5	14.8
11	......	......	......	......	......	......	......	......	......	......	15.2	14.7
12	......	......	......	......	......	......	......	......	......	......	15.0	14.5
13	......	......	......	......	......	......	......	......	......	......	15.6	14.5
14	......	......	......	......	......	......	......	......	......	......	15.5	14.7
15	......	......	......	......	......	......	......	......	......	......	15.5	14.6
16	......	......	......	......	......	......	......	......	......	......	15.1	15.0
17	......	......	......	......	......	......	......	......	......	......	15.1	15.9
18	......	......	......	......	......	......	......	......	......	......	15.1	15.8
19	......	......	......	......	......	......	......	......	......	......	15.0	15.8
20	......	......	......	......	......	......	......	......	......	......	15.8	15.7
21	......	......	......	......	......	......	......	......	......	......	15.1	15.4
22	......	......	......	......	......	......	......	......	......	......	15.3	15.2
23	......	......	......	......	......	......	......	......	......	......	15.1	15.3
24	......	......	......	......	......	......	......	......	......	......	15.4	15.1
25	......	......	......	......	......	......	......	......	......	......	15.3	15.3
26	......	......	......	......	......	......	......	......	......	......	15.2	15.0
27	......	......	......	......	......	......	......	......	......	......	15.0	15.7
28	......	......	......	......	......	......	......	......	......	......	16.0	16.6
29	......	......	......	......	......	......	......	......	......	......	15.2	17.7
30	......	......	......	......	......	......	......	......	......	16.4	15.2	16.7
31	......	......	......	......	......	......	......	......	......	16.3	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River above State Dam at Troy, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	17.2	16.9	16.3	19.1	14.6	13.9	16.4	15.3	15.4	15.3	15.2	15.6
2	17.3	16.9	16.4	20.4	14.6	13.9	17.0	15.3	15.1	15.5	15.2	15.6
3	16.4	16.8	16.4	20.5	14.5	14.5	16.8	15.1	15.2	15.3	15.0	15.5
4	16.1	16.7	16.5	20.1	14.4	14.4	16.9	15.2	15.6	14.9	14.8	15.5
5	15.7	16.5	16.6	19.7	14.3	14.5	16.6	15.2	16.9	15.1	14.6	16.1
6	15.9	16.3	16.6	19.3	14.3	15.1	16.4	15.2	17.3	15.4	14.5	16.8
7	16.2	16.9	16.8	18.9	14.1	14.9	16.3	15.3	17.1	15.5	14.4	17.4
8	17.3	16.9	17.0	18.7	14.1	15.3	16.2	15.3	16.7	15.0	14.6	17.0
9	17.4	16.7	17.2	18.4	14.3	15.7	16.2	16.1	16.5	14.8	14.7	16.3
10	15.4	16.8	16.9	18.2	14.5	16.9	16.2	15.9	16.4	14.8	14.7	16.3
11	15.6	16.9	16.9	18.5	14.5	15.1	15.9	15.5	16.1	14.8	14.7	16.2
12	15.6	17.3	16.9	17.6	14.4	15.2	15.8	15.3	15.9	14.9	14.9	16.2
13	13.6	17.2	16.8	17.4	14.3	14.9	15.7	15.3	15.9	15.0	14.9	16.2
14	13.5	16.5	16.7	17.5	14.8	15.0	15.5	15.2	16.6	15.1	15.2	16.2
15	15.1	16.4	16.7	17.4	14.8	15.1	15.4	15.3	16.4	15.1	15.4	16.0
16	15.5	16.4	16.7	17.2	14.7	15.2	15.4	15.5	15.9	15.0	15.5	16.0
17	15.4	16.4	16.5	17.0	14.7	15.3	15.4	15.5	15.9	15.1	15.5	16.5
18	15.6	16.5	16.4	16.9	14.6	15.4	15.4	15.6	15.8	15.0	15.5	16.8
19	15.2	16.4	16.3	16.9	14.5	15.5	15.1	15.9	16.0	14.9	15.6	16.5
20	15.4	16.4	16.5	16.8	14.4	15.9	15.1	15.7	16.0	14.9	15.6	16.4
21	15.2	16.4	16.4	16.5	14.3	16.4	15.1	15.7	16.6	14.9	15.8	16.4
22	15.2	16.5	16.3	16.3	14.4	16.4	15.1	15.4	16.6	15.6	15.8	16.3
23	15.4	16.5	16.9	15.9	14.3	17.2	15.1	15.5	15.9	16.6	15.8	16.3
24	16.5	16.4	16.4	15.8	14.3	17.6	15.1	15.4	15.9	16.5	15.7	16.3
25	16.2	16.4	18.1	15.5	14.3	17.4	14.7	15.2	15.7	16.4	15.7	16.6
26	16.5	16.4	18.8	15.4	14.3	16.8	14.9	15.0	15.5	15.5	15.4	16.2
27	16.5	16.4	18.3	15.2	14.9	17.7	15.4	15.0	15.4	15.2	15.5	16.2
28	16.4	16.4	18.3	15.0	13.9	17.5	15.4	15.0	15.5	15.2	15.5	16.4
29	16.9	......	18.5	14.9	13.8	17.4	15.1	15.0	15.4	15.2	15.5	16.4
30	17.0	......	18.4	14.7	14.0	17.1	15.3	15.2	15.3	15.0	15.4	16.5
31	16.9	......	18.7	......	13.9	......	15.1	15.2	......	15.0	......	16.1

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River above State Dam at Troy, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	16.3	17.0	15.8	17.1	16.4	17.0	15.8	14.0	13.9	14.2	14.9	16.4
2	15.9	16.8	15.8	16.4	16.3	16.4	15.7	14.1	13.9	14.2	15.7	16.3
3	15.9	16.4	16.0	16.1	16.4	15.2	15.7	14.1	14.0	14.2	15.8	16.3
4	16.1	16.4	16.5	16.0	16.3	14.9	15.6	14.1	13.9	14.3	15.6	16.2
5	16.0	16.3	17.1	16.0	16.2	15.0	15.6	14.0	13.9	14.2	15.4	16.2
6	16.1	16.2	17.3	16.1	16.2	15.0	15.6	13.8	13.8	14.1	15.5	16.4
7	16.0	16.1	17.1	16.1	16.2	15.0	15.7	13.8	13.8	14.1	15.5	16.4
8	16.1	16.0	16.8	16.3	16.3	15.1	15.4	13.9	13.8	14.2	15.4	16.1
9	16.1	16.0	16.7	16.3	16.3	15.2	15.0	14.0	13.9	14.2	15.3	16.1
10	16.2	16.0	16.4	16.3	16.3	15.4	14.3	14.0	14.0	14.1	15.4	16.1
11	16.2	16.0	16.4	16.4	16.1	15.5	14.0	15.1	14.0	14.1	15.4	16.0
12	16.1	16.0	16.3	16.4	16.0	15.5	14.0	15.1	14.2	14.0	15.6	16.2
13	16.2	16.2	16.3	16.5	15.2	15.4	13.9	13.9	14.2	14.0	15.7	16.4
14	15.8	16.2	16.2	16.8	15.2	15.6	13.9	14.0	14.3	14.0	15.7	16.2
15	15.8	16.1	16.1	20.7	15.1	15.7	13.9	14.1	14.3	14.1	15.6	16.2
16	15.8	16.0	16.1	21.5	15.1	15.6	13.8	14.4	14.3	14.1	15.8	16.3
17	15.9	15.9	16.0	21.1	15.0	15.6	13.9	14.4	14.2	14.0	15.8	16.4
18	15.6	15.9	15.7	21.2	14.9	16.0	13.7	14.3	14.2	14.0	15.9	16.4
19	15.4	16.0	15.6	20.2	15.0	16.1	13.8	14.3	14.2	14.0	15.9	16.4
20	15.4	16.1	15.4	18.7	15.0	16.1	13.9	14.2	14.1	14.1	15.8	16.4
21	15.3	16.5	15.3	17.8	15.1	15.9	13.9	14.2	14.2	14.1	15.8	16.4
22	15.3	16.8	14.7	18.2	15.1	15.8	13.8	14.2	14.1	14.1	15.8	16.4
23	15.5	16.6	14.3	17.4	15.0	15.8	13.8	14.2	14.2	14.1	15.6	16.4
24	15.8	17.0	14.5	17.0	15.0	15.7	13.9	14.1	14.2	14.0	15.6	16.3
25	16.4	15.9	14.6	16.7	15.0	15.7	13.9	14.1	14.2	14.1	16.2	15.9
26	17.3	16.0	15.2	16.4	15.1	15.6	13.8	14.1	14.2	14.2	16.7	15.7
27	17.4	16.0	15.7	16.1	15.3	13.2	14.0	14.2	14.3	14.2	16.6	15.7
28	17.3	15.9	16.0	15.7	15.3	13.6	14.0	14.2	14.3	14.2	16.5	15.8
29	17.2	......	16.1	15.5	17.3	13.2	14.0	14.2	14.3	14.1	16.4	15.8
30	17.1	......	16.3	16.5	17.4	13.0	14.1	14.2	14.3	14.1	16.5	15.8
31	17.0	......	17.3	......	17.0	......	14.0	14.1	......	14.1	......	16.2

HUDSON RIVER BELOW DAM OF HUDSON RIVER POWER CO., TWO MILES BELOW MECHANICVILLE, N. Y.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River below Hudson River Power Company's Dam at Mechanicville, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	......	......	......	......	......	30.8	31.1	31.0	32.5
2	......	......	......	......	......	......	......	......	30.6	31.3	31.0	32.0
3	......	......	......	......	......	......	......	......	30.8	31.2	31.4	33.5
4	......	......	......	......	......	......	......	......	33.4	31.2	31.2	35.6
5	......	......	......	......	......	......	......	......	34.5	31.1	31.2	33.6
6	......	......	......	......	......	......	......	......	34.5	31.0	32.0	33.2
7	......	......	......	......	......	......	......	......	34.4	30.8	31.8	32.9
8	......	......	......	......	......	......	......	......	34.0	30.5	31.9	32.8
9	......	......	......	......	......	......	......	......	33.3	31.1	32.0	32.5
10	......	......	......	......	......	......	......	......	32.7	31.0	31.8	32.4
11	......	......	......	......	......	......	......	......	32.4	30.7	31.8	32.1
12	......	......	......	......	......	......	......	......	32.4	30.9	31.2	31.5
13	......	......	......	......	......	......	......	......	32.5	31.8	31.4	31.7
14	......	......	......	......	......	......	......	......	32.1	31.8	31.4	31.2
15	......	......	......	......	......	......	......	......	32.2	31.6	31.2	31.5
16	......	......	......	......	......	......	......	......	31.9	31.6	31.2	31.7
17	......	......	......	......	......	......	......	......	31.2	31.2	31.2	31.0
18	......	......	......	......	......	......	......	30.8	33.6	31.1	31.3	31.1
19	......	......	......	......	......	......	......	31.0	33.9	31.1	30.8	31.0
20	......	......	......	......	......	......	......	31.0	33.9	31.1	31.0	31.8
21	......	......	......	......	......	......	......	31.4	34.4	31.5	31.0	31.2
22	......	......	......	......	......	......	......	31.0	34.2	31.4	30.8	31.9
23	......	......	......	......	......	......	......	30.8	33.6	31.6	30.8	31.8
24	......	......	......	......	......	......	......	30.6	33.0	31.5	30.6	31.8
25	......	......	......	......	......	......	......	30.6	32.7	31.2	30.6	31.3
26	......	......	......	......	......	......	......	30.6	32.2	31.2	30.4	31.6
27	......	......	......	......	......	......	......	30.4	32.0	31.1	30.6	31.2
28	......	......	......	......	......	......	......	30.4	31.8	31.2	30.8	31.0
29	......	......	......	......	......	......	......	30.5	31.6	30.6	30.9	31.2
30	......	......	......	......	......	......	......	30.4	31.5	31.2	32.7	31.4
31	......	......	......	......	......	......	......	30.5	......	31.0	......	31.6

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River below Hudson River Power Company's Dam at Mechanicville, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	32.0	32.3	32.2	33.0	33.0	33.4	31.8	31.0	30.4	30.5	30.8	31.5
2	31.8	31.2	31.0	33.0	32.9	33.0	33.1	30.8	30.2	30.4	30.6	31.3
3	31.8	31.6	32.0	32.6	33.6	32.3	33.0	30.6	30.2	30.2	30.6	31.5
4	31.4	31.7	34.0	32.8	33.6	32.1	32.4	30.8	30.5	30.3	30.3	31.5
5	31.8	31.4	33.6	33.6	33.4	32.0	32.4	30.5	30.6	30.3	30.5	31.1
6	31.8	31.4	32.8	33.6	33.3	31.5	32.0	30.6	30.4	30.4	30.4	31.4
7	31.8	31.2	32.6	33.5	33.1	31.6	31.8	30.8	30.8	29.7	30.5	31.6
8	31.8	31.0	32.2	33.2	32.8	31.8	31.2	30.4	30.5	30.5	30.5	31.8
9	31.4	31.4	32.4	33.2	33.0	31.8	31.4	30.6	30.0	30.4	30.5	30.9
10	31.6	31.4	32.0	33.2	33.4	32.6	31.2	30.6	30.8	30.4	30.5	30.8
11	31.5	30.6	32.0	33.2	33.0	32.9	31.2	30.6	30.8	30.5	30.5	30.8
12	31.4	31.2	32.0	33.1	32.7	33.2	31.2	30.5	30.5	30.6	30.7	30.8
13	31.8	31.4	31.5	33.1	32.4	32.2	31.0	30.7	30.6	30.3	30.7	30.8
14	31.4	31.2	31.3	33.6	33.1	31.8	30.8	30.6	30.5	30.0	31.0	30.8
15	31.2	31.3	31.2	35.2	33.0	32.0	30.6	30.4	30.4	30.5	30.6	30.8
16	31.3	31.0	31.4	37.6	33.4	31.8	31.0	30.5	30.2	30.4	30.6	31.0
17	31.6	31.0	31.0	36.8	32.4	31.6	30.8	30.1	30.4	30.4	30.6	31.3
18	31.4	30.5	30.2	36.6	32.6	32.2	30.9	30.4	30.3	30.4	30.6	31.8
19	31.2	31.0	31.4	36.5	32.4	31.1	30.6	30.0	30.4	30.2	30.6	31.3
20	31.3	31.0	31.2	36.6	32.3	31.9	30.7	30.6	30.3	30.5	30.6	31.4
21	31.4	31.2	31.1	36.4	32.0	31.7	30.6	30.4	30.4	30.5	30.7	31.1
22	32.0	32.4	31.2	36.2	31.8	31.8	30.2	30.6	30.4	31.6	30.7	31.0
23	32.8	33.0	31.6	36.0	31.6	31.3	30.6	30.6	30.2	31.0	30.6	31.0
24	34.8	32.2	30.8	35.8	31.4	32.4	30.8	30.6	30.4	31.0	30.7	31.3
25	34.7	31.6	30.5	35.4	31.2	32.4	30.7	30.6	30.4	30.7	31.4	31.1
26	33.8	33.2	30.8	34.7	32.2	31.8	30.6	30.2	30.4	30.8	31.5	31.0
27	33.9	32.4	32.6	34.2	32.8	31.5	30.6	30.9	30.4	30.7	31.4	30.8
28	33.4	32.2	34.1	33.2	35.8	31.4	30.5	31.0	30.4	30.4	31.4	30.4
29	33.2	......	33.2	33.2	36.0	31.2	30.1	30.8	30.4	30.7	31.2	30.7
30	32.6	......	33.0	33.2	34.4	31.2	30.6	30.8	30.4	30.8	31.4	30.3
31	32.3	......	33.4	......	34.2	......	30.4	30.6	......	30.8	......	31.4

HUDSON RIVER ABOVE DAM OF HUDSON RIVER POWER CO., TWO MILES BELOW MECHANICVILLE, N. Y.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River above Hudson River Power Company's Dam at Mechanicville, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	......	......	......	......	......	49.3	50.0	48.2	49.4
2	......	......	......	......	......	......	......	......	49.4	50.0	48.4	49.1
3	......	......	......	......	......	......	......	......	49.5	49.9	48.7	50.2
4	......	......	......	......	......	......	......	......	50.2	49.8	48.8	50.6
5	......	......	......	......	......	......	......	......	50.5	49.8	49.0	50.2
6	......	......	......	......	......	......	......	......	51.0	49.6	49.2	50.3
7	......	......	......	......	......	......	......	......	50.6	49.3	49.2	49.7
8	......	......	......	......	......	......	......	......	50.4	49.1	49.2	49.3
9	......	......	......	......	......	......	......	......	50.3	49.7	49.3	49.2
10	......	......	......	......	......	......	......	......	50.3	49.6	49.2	49.4
11	......	......	......	......	......	......	......	......	50.0	49.8	49.2	49.0
12	......	......	......	......	......	......	......	......	50.0	50.2	49.0	48.9
13	......	......	......	......	......	......	......	......	50.0	50.6	48.9	49.0
14	......	......	......	......	......	......	......	......	49.9	50.4	48.6	48.8
15	......	......	......	......	......	......	......	......	49.8	50.9	48.5	48.6
16	......	......	......	......	......	......	......	......	49.2	50.6	48.6	48.6
17	......	......	......	......	......	......	......	......	48.8	48.8	48.6	48.6
18	......	......	......	......	......	......	......	49.7	49.6	48.2	48.6	48.1
19	......	......	......	......	......	......	......	49.6	50.0	48.4	48.7	48.3
20	......	......	......	......	......	......	......	49.6	50.2	48.4	48.6	48.3
21	......	......	......	......	......	......	......	49.5	50.4	48.8	48.3	48.0
22	......	......	......	......	......	......	......	49.4	50.4	49.2	48.6	49.0
23	......	......	......	......	......	......	......	49.8	49.8	49.1	48.0	49.1
24	......	......	......	......	......	......	......	49.6	49.8	48.8	47.9	49.3
25	......	......	......	......	......	......	......	49.4	49.5	48.7	48.0	48.9
26	......	......	......	......	......	......	......	49.4	49.3	48.6	48.0	48.8
27	......	......	......	......	......	......	......	49.3	49.0	48.5	48.2	48.2
28	......	......	......	......	......	......	......	49.4	49.2	48.4	48.2	48.2
29	......	......	......	......	......	......	......	49.5	49.2	48.2	48.4	48.2
30	......	......	......	......	......	......	......	49.3	49.1	48.6	49.9	48.6
31	......	......	......	......	......	......	......	49.4	......	48.5	......	49.3

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River above Hudson River Power Company's Dam at Mechanicville, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	49.2	49.2	48.6	49.7	49.5	49.6	49.1	48.9	49.2	49.2	49.3	49.1
2	49.2	49.4	49.2	49.6	49.4	49.5	49.4	49.2	49.0	49.1	49.3	49.2
3	48.8	49.1	48.4	49.6	49.9	49.5	49.3	49.2	48.6	49.2	49.2	49.2
4	48.5	49.0	51.4	49.6	49.8	49.6	49.4	49.1	49.2	49.2	49.3	49.8
5	49.0	48.4	50.0	49.6	49.8	49.3	49.5	49.4	49.0	49.2	49.2	49.2
6	49.0	48.2	49.6	49.6	49.8	49.0	49.4	49.2	48.8	49.4	49.3	49.2
7	49.2	48.2	49.4	49.6	49.5	49.2	49.2	49.1	49.8	49.2	49.2	49.2
8	49.2	48.2	49.5	49.5	49.4	49.2	49.2	49.3	49.2	49.3	49.2	49.0
9	48.7	48.1	49.4	49.5	49.6	49.2	48.6	49.2	49.4	49.0	49.1	48.7
10	48.1	48.5	49.4	49.6	49.6	49.6	48.6	49.1	49.2	49.2	49.2	48.8
11	48.0	48.8	49.5	49.4	49.4	49.4	48.4	49.2	49.1	49.0	49.2	48.4
12	48.2	48.6	49.4	49.5	49.2	49.5	48.6	49.4	49.2	49.4	49.1	48.6
13	48.9	48.6	49.2	49.5	49.5	49.0	48.3	49.2	49.1	49.2	49.3	49.1
14	48.9	48.4	49.3	49.6	49.4	49.0	48.7	49.3	48.9	48.7	49.3	49.0
15	48.6	48.6	49.7	51.2	49.4	48.8	48.0	49.2	49.1	49.3	49.3	49.2
16	48.4	48.5	48.9	52.6	49.6	48.9	48.0	49.2	49.0	49.1	49.3	49.4
17	48.7	48.4	49.2	52.0	49.5	49.4	48.2	49.3	49.2	49.1	49.2	49.2
18	48.5	48.8	49.0	52.0	49.6	49.2	48.2	49.1	49.0	49.2	48.8	49.3
19	48.3	48.7	49.0	51.8	49.4	49.2	48.0	48.2	49.0	49.2	49.3	49.3
20	48.2	48.4	48.4	51.8	49.6	49.1	48.7	49.4	49.0	49.3	49.3	49.3
21	48.9	48.4	48.2	51.8	49.3	48.8	48.6	49.2	49.2	49.2	49.2	49.1
22	49.2	49.4	48.2	51.8	49.2	48.8	49.2	49.0	49.3	49.2	49.2	49.3
23	49.6	49.0	48.4	51.6	49.0	48.6	49.2	48.8	48.8	49.0	49.3	49.3
24	50.6	49.0	48.2	51.4	48.8	49.4	49.0	49.0	49.2	49.2	49.3	49.3
25	50.0	49.5	48.6	50.9	49.0	49.1	48.8	49.1	49.1	49.0	49.4	49.4
26	50.4	49.4	48.2	50.4	49.5	48.8	48.8	49.2	49.0	49.2	49.0	49.4
27	49.7	49.0	49.2	50.2	50.0	48.6	48.8	48.9	48.6	49.3	49.2	49.2
28	49.8	48.8	50.0	49.8	50.4	48.5	49.0	49.2	49.2	49.0	49.2	48.1
29	49.5	......	49.4	49.8	51.5	48.4	49.0	49.2	49.2	49.2	49.3	48.9
30	49.6	......	49.4	49.4	50.7	48.5	49.2	49.0	49.1	49.1	49.2	49.2
31	49.2	......	49.6	......	50.2	......	49.2	49.0	......	49.3	......	49.8

HUDSON RIVER AT TOLL BRIDGE, MECHANICVILLE, N. Y.

A gaging station was established at the toll bridge in Mechanicville, August 16, 1905, by D. B. LaDu of this Department. The gage is a vertical board, graduated to tenths, and is fastened to the down-stream end of the east pier of said bridge. Readings are taken twice each day and the appended table shows the mean of these observations reduced to elevation of water-surface. The elevation of the zero mark of the gage is 48.77. The observer is W. E. Downing

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River at Toll Bridge, Mechanicville, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	......	......	......	......	......	49.87	49.57	49.12	50.42
2	......	......	......	......	......	......	......	......	49.72	49.77	49.22	50.07
3	......	......	......	......	......	......	......	......	50.22	49.72	49.62	51.72
4	......	......	......	......	......	......	......	......	51.07	49.67	49.67	52.77
5	......	......	......	......	......	......	......	......	52.37	49.42	49.62	51.52
6	......	......	......	......	......	......	......	......	52.62	49.27	49.92	51.47
7	......	......	......	......	......	......	......	......	52.52	48.82	50.02	51.07
8	......	......	......	......	......	......	......	......	51.97	48.77	50.07	50.67
9	......	......	......	......	......	......	......	......	52.62	49.52	50.27	50.37
10	......	......	......	......	......	......	......	......	51.22	49.22	50.07	50.27
11	......	......	......	......	......	......	......	......	51.02	49.37	49.97	50.12
12	......	......	......	......	......	......	......	......	51.02	49.72	49.47	49.92
13	......	......	......	......	......	......	......	......	51.17	50.02	49.77	49.67
14	......	......	......	......	......	......	......	......	50.92	50.27	49.67	49.77
15	......	......	......	......	......	......	......	......	50.52	50.47	50.02	50.67
16	......	......	......	......	......	......	......	50.47	50.32	49.77	50.42	49.97
17	......	......	......	......	......	......	......	50.47	49.92	49.57	50.37	49.17
18	......	......	......	......	......	......	......	50.62	50.67	49.22	50.22	48.92
19	......	......	......	......	......	......	......	50.27	51.72	49.32	49.17	49.07
20	......	......	......	......	......	......	......	50.02	51.92	49.42	49.27	49.22
21	......	......	......	......	......	......	......	50.12	52.27	49.82	49.02	49.67
22	......	......	......	......	......	......	......	49.77	52.07	49.87	48.87	50.17
23	......	......	......	......	......	......	......	50.17	51.57	49.87	48.77	50.02
24	......	......	......	......	......	......	......	49.27	51.12	49.67	48.77	50.02
25	......	......	......	......	......	......	......	49.72	50.82	49.47	48.82	49.82
26	......	......	......	......	......	......	......	49.47	50.52	49.27	48.72	49.72
27	......	......	......	......	......	......	......	49.77	50.37	49.22	48.87	49.37
28	......	......	......	......	......	......	......	49.77	50.12	49.22	48.82	49.12
29	......	......	......	......	......	......	......	49.82	49.92	48.82	49.27	49.27
30	......	......	......	......	......	......	......	49.47	49.82	49.27	50.92	49.67
31	......	......	......	......	......	......	......	49.87	......	49.22	......	49.87

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River at Toll Bridge, Mechanicville, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	50.0	50.5	49.9	51.0	50.8	51.2	50.0	49.6	49.7	49.6	49.8	50.0
2	50.1	50.5	50.2	51.0	50.8	51.9	51.0	49.5	49.4	49.6	49.7	49.7
3	49.9	50.5	50.1	50.8	51.5	50.8	50.8	49.4	48.7	49.6	49.6	49.4
4	49.9	50.2	53.6	50.8	51.4	50.6	50.6	49.8	49.6	49.7	49.2	49.2
5	50.0	50.5	52.0	51.2	51.2	50.2	50.6	49.6	49.6	49.7	49.6	49.4
6	50.0	50.6	51.7	51.3	51.2	50.0	50.4	49.7	49.2	49.6	49.4	49.2
7	49.8	50.6	50.7	51.3	51.0	50.1	50.1	49.8	49.8	49.4	49.4	49.9
8	49.9	50.4	50.6	51.0	50.8	50.2	49.8	49.6	49.7	49.6	49.6	50.4
9	50.1	50.2	50.6	51.0	51.0	50.4	49.8	49.6	49.4	49.4	49.5	49.8
10	50.0	50.2	50.4	51.1	51.2	50.8	49.6	49.6	49.6	49.7	49.6	49.6
11	49.8	49.9	50.2	51.0	50.9	51.0	49.4	49.4	49.6	49.6	49.4	49.4
12	49.8	50.1	50.1	51.0	50.8	51.1	49.4	49.6	49.6	49.6	49.6	49.2
13	50.0	50.2	49.9	50.8	50.7	50.3	49.4	49.7	49.7	49.6	49.8	49.2
14	49.8	50.0	49.8	51.2	50.9	50.1	49.2	49.8	49.6	48.9	49.8	49.2
15	49.6	50.0	50.0	53.0	51.2	50.0	48.9	49.6	49.5	49.8	49.7	49.4
16	49.2	50.0	49.9	54.9	51.0	50.0	49.2	49.4	49.6	49.4	49.7	49.9
17	49.8	50.0	49.8	54.2	50.8	50.4	49.2	49.6	49.2	49.4	49.8	50.0
18	49.6	49.6	49.6	54.0	50.8	50.4	49.2	49.3	49.4	49.6	49.0	50.0
19	49.5	50.0	49.6	53.8	50.6	50.4	49.1	48.4	49.4	49.4	50.0	50.0
20	49.3	49.9	49.7	53.8	50.6	50.2	49.2	49.7	49.6	49.8	50.2	49.9
21	49.5	49.9	49.4	53.8	50.2	50.0	49.2	49.4	49.6	49.8	50.0	50.0
22	50.3	51.6	49.0	53.6	49.9	49.6	49.4	49.5	49.8	50.0	50.2	50.1
23	50.9	51.2	49.4	53.6	49.8	49.8	49.6	49.6	49.8	49.8	50.1	49.5
24	51.4	51.0	49.0	53.2	49.8	50.6	49.6	49.5	49.6	49.7	50.2	49.5
25	52.1	51.1	48.7	52.8	50.0	50.4	49.3	49.6	49.6	49.8	50.1	49.6
26	51.8	51.0	49.0	52.2	50.4	50.0	49.2	49.6	49.7	49.8	49.8	49.7
27	51.6	50.4	50.5	51.8	51.2	49.7	49.2	49.6	48.4	49.6	50.0	49.6
28	51.2	50.6	51.6	51.4	53.2	49.6	49.3	50.0	49.7	49.4	50.0	49.3
29	51.0	......	51.0	51.1	53.4	49.4	49.0	49.8	49.6	50.0	50.0	49.1
30	50.9	......	50.9	51.0	52.2	49.5	49.1	49.7	49.2	49.8	50.0	49.4
31	50.7	......	51.2	......	51.8	......	50.0	49.7	......	49.8	......	50.5

List of Discharge Measurements of Hudson River at Toll Bridge, Mechanicville, N. Y.

DATE.	Gage height.	Elevation of water-surface.	Width.	Area of section.	Mean velocity.	Discharge.
1905.	*Feet.*		*Feet.*	*Square feet.*	*Ft. per second.*	*Second-feet.*
October 10	0.3	49.07	457.0	4,640	1.06	4,900
November 13	0.8	49.57	461.5	4,870	1.37	6,649

HUDSON RIVER AT MECHANICVILLE, N. Y.

A record of the flow of Hudson river at Mechanicville has been kept by the Duncan Company since December, 1888. The record includes two daily readings on the depth on the crest of the dam, and a continuous record of the run of the water-wheels in the adjoining paper-mill. The accompanying tables, computed by Mr. R. P. Bloss, the engineer of the company, show the daily and monthly mean flow at Mechanicville.

The dam of the West Virginia Pulp and Paper Company at Mechanicville was raised during 1904, a concrete crest and apron being added, so that the dam has now a rounded, or ogee profile. A discharge curve has been calculated, using co-efficients of discharge derived from United States Geological Survey experiments on models of dams of ogee cross-section by Robert E. Horton.

Mean Daily Discharge, Second-feet, of Hudson River at Duncan Dam at Mechanicville, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	9,079	10,307	7,212	15,894	14,106	14,947	7,238	4,753	3,441	3,470	4,318	6,571
2	7,066	9,631	7,176	14,263	12,941	13,222	13,393	4,647	2,324	2,879	4,134	5,492
3	6,614	6,768	7,064	12,720	16,631	11,554	12,086	4,067	1,581	3,155	3,944	6,363
4	7,207	3,924	23,939	12,882	15,984	10,675	9,450	4,251	3,511	3,189	2,447	4,443
5	8,548	6,599	13,643	15,297	15,863	8,895	10,816	3,092	3,284	3,166	3,770	4,479
6	6,303	5,939	11,157	15,338	13,606	8,107	9,440	4,049	3,012	2,735	3,499	3,635
7	6,575	6,276	10,672	15,276	14,111	8,342	8,880	4,126	4,313	1,431	3,457	5,315
8	7,388	6,187	10,050	12,398	12,750	8,232	5,853	4,160	3,906	3,342	3,535	5,208
9	5,861	6,470	10,443	13,956	12,957	8,246	6,399	3,801	2,414	3,121	3,398	4,029
10	5,609	6,770	9,943	14,230	10,155	10,567	6,118	3,695	3,438	2,942	3,228	3,690
11	5,804	4,317	7,814	14,544	13,017	12,781	6,000	2,610	3,248	2,878	2,150	4,447
12	5,818	5,822	9,130	14,110	12,465	14,395	6,032	2,468	3,308	2,868	3,814	3,737
13	7,685	5,690	7,487	13,704	10,145	10,110	5,773	3,989	3,161	2,745	4,256	4,444
14	5,820	5,548	7,021	16,309	12,722	8,608	5,432	3,912	2,753	872	4,589	4,312
15	7,204	6,222	7,432	21,897	12,701	8,273	3,069	3,160	2,797	2,879	3,740	4,579
16	6,132	5,883	6,008	40,279	13,615	8,379	4,765	3,308	620	2,818	3,751	4,723
17	7,600	5,484	6,391	33,922	11,419	7,487	4,979	2,926	3,314	2,414	3,958	5,969
18	6,599	5,183	4,109	33,159	11,087	9,928	5,399	2,562	3,063	2,869	2,724	5,954
19	6,297	7,418	6,455	31,888	10,877	9,928	4,672	585	3,086	2,837	7,038	5,258
20	5,818	6,101	6,159	31,522	8,964	8,925	4,395	2,872	3,108	2,858	7,782	5,306
21	4,929	6,014	5,668	31,104	8,573	7,699	3,770	2,540	3,097	3,116	7,347	4,777
22	9,849	12,280	5,694	29,575	8,507	6,907	187	2,976	3,108	5,711	8,535	5,729
23	11,564	10,643	5,670	29,046	7,545	6,780	4,025	3,279	2,328	5,086	8,632	4,096
24	22,043	9,426	5,129	28,147	7,514	10,152	4,585	3,318	6,497	4,467	8,549	4,386
25	20,426	7,817	2,830	23,723	8,079	10,185	4,449	3,313	3,321	4,224	5,903	......
26	17,912	13,489	4,993	20,240	9,600	8,243	3,811	2,451	3,246	4,400	7,658	4,778
27	17,119	10,842	11,405	18,732	12,348	7,600	3,855	4,486	3,032	4,251	6,976	4,454
28	13,925	17,155	16,972	16,488	26,892	6,849	3,794	4,737	3,233	3,153	6,572	4,440
29	14,137	......	13,979	12,718	27,833	6,369	1,738	4,410	3,166	5,371	7,149	3,997
30	10,992	......	13,063	14,514	20,204	6,302	3,865	4,054	1,435	4,709	6,964	5,348
31	10,564	......	14,364	......	18,135	......	4,927	3,333	......	4,508	......	6,348
Mean	9,305	7,650	8,906	20,596	13,269	9,290	5,780	3,482	3,072	3,370	5,127	4,877

Monthly Discharge of Hudson River at Mechanicville, N. Y.
[Drainage area, 4,500 square miles.]

MONTH.	Discharge in Second-feet.			Run-off.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1906.					
January	22,043	4,929	9,305	2.07	2.38
February	17,155	3,924	7,650	1.70	1.77
March	23,939	2,830	8,906	1.98	2.28
April	40,279	12,398	20,596	4.57	5.12
May	27,833	7,514	13,269	2.95	3.39
June	14,947	6,302	9,290	2.06	2.29
July	13,393	187	5,780	1.28	1.47
August	4,753	585	3,482	.773	.889
September	6;497	620	3,072	.682	.757
October	5,711	872	3,370	.748	.860
November	8,632	2,150	5,127	1.14	1.26
December (30 days)	6,571	3,635	4,877	1.08	1.20

HUDSON RIVER AT B. & M. R. R. BRIDGE, ABOVE MECHANICVILLE, N. Y.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River above Mechanicville, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	......	......	......	......	......	68.2	69.0	68.5	69.5
2	......	......	......	......	......	......	......	......	68.2	69.0	68.5	69.6
3	......	......	......	......	......	......	......	......	69.1	68.8	68.8	70.2
4	......	......	......	......	......	......	......	......	70.4	68.7	68.8	70.2
5	......	......	......	......	......	......	......	......	70.7	68.6	69.2	70.1
6	......	......	......	......	......	......	......	......	70.6	68.5	69.2	70.1
7	......	......	......	......	......	......	......	......	70.8	68.5	69.1	70.0
8	......	......	......	......	......	......	......	......	70.6	68.8	69.2	69.8
9	......	......	......	......	......	......	......	......	70.2	68.7	69.2	69.7
10	......	......	......	......	......	......	......	......	70.0	68.4	69.1	......
11	......	......	......	......	......	......	......	......	69.8	68.4	69.0	......
12	......	......	......	......	......	......	......	......	69.5	68.3	69.2	......
13	......	......	......	......	......	......	......	......	69.6	68.4	69.0	......
14	......	......	......	......	......	......	......	......	69.4	69.1	69.0	......
15	......	......	......	......	......	......	......	......	69.2	69.4	69.0	......
16	......	......	......	......	......	......	......	68.8	69.0	69.1	68.9	......
17	......	......	......	......	......	......	......	69.0	69.2	68.8	68.8	......
18	......	......	......	......	......	......	......	69.2	70.4	68.6	68.8	......
19	......	......	......	......	......	......	......	69.0	70.5	68.6	68.9	......
20	......	......	......	......	......	......	......	69.0	70.6	68.6	68.8	......
21	......	......	......	......	......	......	......	68.8	70.8	69.0	68.6	......
22	......	......	......	......	......	......	......	68.4	70.6	69.4	69.4	......
23	......	......	......	......	......	......	......	68.4	70.4	69.2	69.2	......
24	......	......	......	......	......	......	......	68.3	70.2	69.0	69.0	......
25	......	......	......	......	......	......	......	68.2	69.9	68.7	69.0	......
26	......	......	......	......	......	......	......	68.2	69.4	68.6	68.8	......
27	......	......	......	......	......	......	......	68.5	69.2	68.5	68.2	......
28	......	......	......	......	......	......	......	67.6	69.0	68.6	68.4	......
29	......	......	......	......	......	......	......	67.7	68.9	68.7	69.0	......
30	......	......	......	......	......	......	......	67.4	68.8	68.6	69.6	......
31	......	......	......	......	......	......	......	68.4	......	68.6	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River above Mechanicville, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	......	......	......	70.4	70.0	70.15	69.5	68.2	67.8	68.2	68.2	68.8
2	......	......	......	70.15	69.9	69.9	70.1	68.3	68.2	67.6	68.1	69.1
3	......	......	......	69.9	70.35	70.0	69.9	68.1	68.4	67.6	67.6	69.1
4	......	......	......	69.85	70.25	69.65	69.9	68.2	68.4	67.4	68.05	68.3
5	......	......	......	70.25	70.15	69.3	69.7	68.6	67.2	67.2	67.8	68.4
6	......	......	......	70.4	70.4	69.0	69.0	68.2	66.4	67.1	68.0	67.9
7	......	......	......	70.25	70.15	69.1	69.1	68.1	68.0	67.5	67.9	68.5
8	......	......	......	70.25	69.9	69.05	69.3	68.0	67.6	68.0	68.0	68.5
9	......	......	......	70.1	69.95	69.2	69.0	67.7	68.4	66.8	67.7	68.9
10	......	......	......	70.05	70.15	70.05	68.8	66.4	68.1	67.8	66.6	68.3
11	......	......	......	70.2	69.9	70.0	68.7	66.2	67.2	67.1	68.2	67.9
12	......	......	......	70.05	69.8	70.0	68.6	68.6	67.8	67.8	68.2	66.9
13	......	......	......	70.0	69.95	69.4	68.6	68.0	66.8	68.55	68.1	68.1
14	......	......	......	70.2	70.1	69.15	68.5	67.8	65.8	67.4	68.2	68.2
15	......	......	......	71.75	70.15	69.05	68.9	67.2	66.45	67.2	67.4	67.9
16	......	......	......	72.95	70.0	69.05	68.7	67.4	67.1	67.2	68.0	69.0
17	......	......	......	72.35	69.7	69.5	68.3	65.0	68.1	66.8	68.0	68.7
18	......	......	......	72.2	69.55	69.65	68.4	64.7	67.4	67.2	68.2	68.9
19	......	......	......	72.1	69.55	69.3	68.3	66.9	67.8	66.9	68.9	68.5
20	......	......	......	72.15	69.85	69.2	68.1	68.2	68.0	66.7	69.0	68.7
21	......	......	69.45	72.0	69.55	67.0	67.9	67.8	67.9	69.0	68.9	68.4
22	......	......	69.5	72.2	69.05	69.75	67.3	68.1	67.8	68.8	69.0	68.7
23	......	......	69.5	71.8	69.0	68.8	68.0	68.0	68.2	68.4	69.2	69.0
24	......	......	69.6	71.65	68.95	69.95	68.3	67.9	67.6	68.2	69.1	68.4
25	......	......	69.65	71.3	69.15	69.55	68.2	68.2	67.8	68.0	69.4	69.0
26	......	......	69.65	70.95	69.4	69.1	67.9	68.6	66.4	68.2	69.2	68.7
27	......	......	70.3	70.7	70.35	68.95	67.6	68.4	66.7	68.2	68.8	68.7
28	......	......	70.3	70.4	71.75	68.85	67.4	68.4	67.8	68.8	68.8	68.8
29	......	......	69.05	70.4	71.65	68.75	67.9	68.2	67.7	68.6	68.8	67.8
30	......	......	68.9	70.2	70.85	68.65	68.3	68.0	68.2	68.2	68.8	69.1
31	......	......	69.2	......	70.65	......	68.4	67.4	......	68.2	......	68.8

HOOSIC RIVER AT SCHAGHTICOKE, N. Y.

Mean Daily Gage Height, in Feet, of Hoosic River at Schaghticoke, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	1.1	0.3	0.2	0.0	0.0	0.7	0.5	0.5
2	......	......	......	......	0.9	0.2	0.3	0.3	0.0	0.6	0.4	0.4
3	......	......	......	4.1	0.8	0.2	0.2	0.1	0.0	0.5	0.3	0.3
4	......	......	......	3.8	0.7	0.2	0.2	0.3	0.3	0.4	0.3	0.3
5	......	......	......	3.7	0.7	0.3	0.1	0.3	0.1	0.3	0.4	0.2
6	......	......	......	3.8	0.6	0.3	0.1	0.1	0.2	0.3	0.3	0.4
7	......	......	......	3.9	0.6	0.4	0.1	0.0	0.1	0.3	0.3	0.3
8	......	......	......	4.0	0.5	0.7	0.1	0.2	0.1	0.1	0.3	0.3
9	......	......	......	4.4	0.5	2.8	0.1	0.1	0.1	0.1	0.3	0.3
10	......	......	......	4.5	0.5	1.9	0.2	0.1	0.1	0.3	0.3	......
11	......	......	......	4.3	0.5	1.3	0.3	0.0	0.2	0.5	0.3	0.3
12	......	......	......	4.1	0.5	1.0	0.3	0.4	0.2	0.5	0.3	0.3
13	......	......	......	3.9	0.4	0.9	0.3	0.2	0.1	0.5	0.3	0.5
14	......	......	......	3.9	0.4	0.7	0.3	0.0	0.1	0.5	0.3	0.5
15	......	......	......	3.7	0.3	0.6	0.3	0.1	1.6	0.3	0.5	0.3
16	......	......	......	3.7	0.6	0.5	0.3	0.2	1.1	0.3	0.5	0.3
17	......	......	......	3.8	0.9	0.4	0.6	0.3	0.5	0.4	0.4	0.3
18	......	......	......	3.8	0.5	0.3	0.1	0.1	0.4	0.3	0.4	0.4
19	......	......	......	3.9	0.6	0.3	0.3	0.0	0.4	0.3	0.3	0.3
20	......	......	......	3.7	0.9	0.3	0.3	0.3	0.4	0.3	0.3	0.3
21	......	......	......	3.7	0.7	0.3	0.2	0.3	0.4	0.7	0.4	0.4
22	......	......	......	3.6	0.6	0.3	0.1	0.1	0.2	1.5	0.5	0.5
23	......	......	......	3.7	0.5	0.2	0.1	0.3	0.3	1.1	0.5	0.5
24	......	......	......	0.7	0.5	0.3	0.1	0.2	0.3	0.7	0.5	0.5
25	......	......	......	0.9	0.4	0.1	0.1	0.2	0.3	0.7	0.5	0.3
26	......	......	......	0.9	0.6	0.1	0.3	0.1	0.3	0.7	0.5	0.3
27	......	......	......	0.9	0.5	0.1	0.0	0.1	0.4	0.7	0.3	0.4
28	......	......	......	1.4	0.5	0.1	0.3	0.3	0.3	0.5	0.3	1.8
29	......	......	......	1.3	0.3	0.1	0.4	0.2	0.3	0.5	0.3	1.0
30	......	......	......	1.3	0.3	0.1	0.3	0.1	1.1	0.5	0.5	0.7
31	......	......	......	......	0.4	......	0.1	0.0	......	0.5	......	0.7

Mean Daily Gage Height, in Feet, of Hoosic River at Schaghticoke, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	0.6	0.5	0.5	2.1	0.6	0.2	0.5	0.7	0.5	0.4	0.3	0.9
2	0.7	0.5	0.5	2.0	0.5	0.2	0.3	0.4	0.4	0.5	0.2	0.9
3	0.8	0.5	0.4	1.7	0.5	0.2	0.5	0.3	1.3	0.4	0.3	2.3
4	0.5	0.5	0.4	1.1	0.5	0.2	0.3	0.3	1.7	0.4	0.3	2.3
5	0.6	0.4	0.3	1.2	0.5	0.1	0.3	0.3	1.6	0.3	0.3	1.4
6	0.7	0.5	0.3	1.0	0.5	0.1	0.3	0.3	1.3	0.3	0.3	1.1
7	0.7	0.7	0.3	1.1	0.5	0.3	0.2	0.3	0.8	0.3	0.4	1.0
8	1.7	0.7	0.4	1.1	0.5	0.3	0.2	0.3	0.6	0.3	0.5	0.9
9	1.5	0.7	0.4	1.0	0.5	0.3	0.2	0.2	0.5	0.2	0.4	0.8
10	1.0	0.6	0.5	1.0	0.5	0.2	0.2	0.3	0.5	0.3	0.3	0.8
11	1.1	0.4	0.5	1.4	0.5	0.2	0.1	0.1	0.5	0.3	0.3	0.7
12	0.7	0.4	0.5	1.6	0.4	0.2	0.1	1.0	0.5	0.5	0.3	0.7
13	1.5	0.4	0.5	1.4	0.3	0.2	0.1	0.7	0.7	0.5	0.3	0.7
14	1.1	0.4	0.5	1.2	0.3	0.2	0.1	0.1	0.7	0.4	0.3	0.5
15	0.7	0.5	0.5	1.0	0.5	0.2	0.1	0.5	0.5	0.3	0.3	0.5
16	1.2	0.5	0.5	0.9	0.5	0.1	0.1	0.9	0.5	0.3	0.3	0.6
17	1.0	0.6	0.4	0.8	0.5	0.1	0.1	0.8	0.4	0.3	0.3	0.7
18	0.9	0.5	0.5	0.6	0.5	0.1	0.2	0.6	1.0	0.3	0.3	0.7
19	0.7	0.5	1.9	0.6	0.5	0.2	0.2	0.4	1.4	0.3	0.3	0.5
20	0.6	0.5	1.7	0.6	0.4	0.3	0.3	0.3	1.1	0.3	0.2	0.5
21	1.1	0.5	1.7	0.6	0.4	0.3	0.3	0.3	1.2	0.5	0.2	0.7
22	0.6	0.6	0.9	0.9	0.4	1.6	0.1	0.3	1.2	0.5	0.2	1.0
23	0.6	0.5	0.8	0.6	0.3	1.0	0.1	0.3	0.9	0.5	0.2	0.8
24	0.5	0.5	0.7	0.6	0.3	0.6	0.1	0.2	0.6	0.3	0.3	0.7
25	0.5	0.5	2.7	0.5	0.3	0.5	0.1	0.2	0.6	0.3	0.2	0.7
26	0.4	0.4	2.0	0.6	0.3	0.8	0.1	0.2	0.6	0.3	0.3	0.7
27	0.4	0.4	2.1	0.5	0.3	0.9	0.1	0.2	0.5	0.3	0.2	0.5
28	0.5	0.4	2.1	0.5	0.2	0.5	0.1	0.3	0.5	0.3	0.2	0.5
29	0.5	......	2.0	0.5	0.2	0.5	0.1	0.3	0.5	0.3	0.5	0.7
30	0.3	......	2.5	0.6	0.2	0.5	0.2	0.2	0.5	0.3	1.6	0.7
31	0.6	......	2.7	......	0.2	......	1.0	1.0	......	0.3	......	0.7

Mean Daily Gage Height, in Feet, of Hoosic River at Schaghticoke, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	0.6	0.5	0.6	1.1	0.6	0.9	0.8	0.4	0.1	0.1	0.4	0.6
2	0.6	0.5	0.6	0.9	0.6	0.7	0.8	0.2	0.0	—0.2	0.4	0.4
3	0.5	0.4	0.6	0.6	1.0	......	0.7	0.2	—0.1	0.0	0.4	0.5
4	0.4	0.4	2.4	0.7	0.9	......	0.6	0.2	0.0	0.0	0.4	0.4
5	0.7	0.4	1.2	1.0	0.7	......	0.7	0.1	0.1	—0.2	0.4	0.3
6	0.5	0.3	0.8	1.0	0.7	......	0.6	0.2	0.0	—0.3	0.3	0.5
7	0.6	0.4	0.8	1.0	0.7	0.7	0.5	0.2	0.0	—0.1	0.2	0.8
8	0.4	0.5	0.6	0.9	0.7	0.8	0.4	......	—0.2	0.0	0.3	0.4
9	0.4	0.5	0.7	0.8	0.7	1.0	0.4	0.2	—0.2	—0.1	0.4	0.4
10	0.4	0.5	0.7	1.0	1.0	1.0	0.4	0.2	—0.3	0.2	0.3	0.4
11	0.4	0.4	0.6	1.2	0.8	1.0	0.4	0.2	—0.4	0.3	0.2	0.4
12	0.6	0.5	0.6	1.3	0.7	0.9	0.4	0.2	—0.4	0.2	0.4	0.3
13	0.6	0.5	0.5	1.1	0.7	0.7	0.2	0.2	—0.4	0.2	0.5	0.5
14	0.5	0.5	0.4	1.3	0.7	0.6	0.2	0.2	0.5	0.2	0.4	0.5
15	0.5	0.5	0.4	2.3	0.6	0.5	0.2	0.2	—0.2	0.2	0.4	0.6
16	0.6	0.4	0.4	2.7	0.6	0.5	0.2	0.2	—0.1	0.2	0.3	0.9
17	0.6	0.4	0.4	1.7	0.5	0.6	0.2	0.0	—0.4	0.1	0.3	0.8
18	0.6	0.4	0.4	1.6	0.4	0.6	0.5	0.0	—0.1	0.2	0.4	0.6
19	0.5	0.4	0.4	1.5	0.4	0.6	0.3	0.0	—0.4	0.1	1.2	0.3
20	0.5	0.4	0.5	1.4	0.4	0.4	0.2	0.0	—0.1	0.3	1.0	0.5
21	0.5	0.8	0.3	1.2	0.4	0.4	0.3	0.0	—0.6	0.9	0.8	0.6
22	1.0	2.1	0.4	1.0	0.3	0.4	0.2	0.1	—0.2	0.6	0.9	0.6
23	1.5	1.3	0.3	1.0	0.3	0.4	0.3	0.1	0.3	0.4	0.8	0.5
24	1.8	0.8	0.2	1.0	0.3	1.3	0.4	0.1	0.2	0.4	0.7	0.4
25	1.2	0.8	0.3	0.9	0.4	0.8	0.2	0.1	0.3	0.5	0.6	0.3
26	1.0	1.3	0.3	0.8	0.4	0.6	0.2	0.0	0.2	0.5	0.6	0.3
27	0.8	0.8	1.5	0.7	0.8	0.5	0.2	0.1	0.1	0.5	0.6	0.5
28	0.7	0.6	2.2	0.6	2.4	0.4	0.2	0.2	— 0.2	0.4	0.6	0.5
29	0.6	......	1.2	0.6	2.0	0.4	0.1	0.2	0.1	0.4	0.6	0.4
30	0.6	......	1.2	0.6	1.4	0.5	0.2	0.2	0.1	0.4	0.5	0.3
31	0.6	......	1.2	......	1.2	......	0.5	0.1	......	0.4	......	1.1

HOOSIC RIVER AT BUSKIRK, N. Y.

Hoosic river has its sources on the west slope of the Hoosac mountains in Vermont and Massachusetts. Two head branches, one flowing southward, the other northward along the west slope of this range, unite at North Adams, Mass., and the stream then flows northwestward, entering the Hudson three miles north of Mechanicville. Above Buskirk the drainage basin is rugged and precipitous, the distribution of tributaries affording rapid concentration of the run-off from the steep rock slopes. The ridges are sparsely wooded. The soil in the valleys is generally firm and tenacious. The general elevation of the valley at the junction of the head waters is 1,000 feet. Numerous dams, affording power for textile, agricultural implement, and other industries are scattered throughout the length of the stream from North Adams to Schaghticoke. The drainage basin contains no important lakes and but one storage reservoir, at Farnam, near the head of South branch.

South of Hoosic river the State boundary follows the Taconic ridge, which forms the divide between the Hoosic in Massachusetts and the Little Hoosic in New York.

A gaging station was established September 25, 1903, at the highway bridge in Buskirk village, by Robert E. Horton, for the U. S. Geological Survey, by which it has since been maintained in co-operation with this Department. The channel is straight near the gaging station. The banks are high and seldom overflow. The current is exceptionally smooth, but is rather slow during low water. A standard chain gage is attached to the covered wooden highway bridge. The length of the chain is 28.17 feet. The gage is read twice each day by Bert C. Henry. A bench-mark is located on the up-stream corner of the left abutment; elevation, 36.03 feet above gage datum.

Mean Daily Gage Height, in Feet, of Hoosic River at Buskirk, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	2.52	2.68	2.60	3.55	2.95	3.52	2.42	2.50	1.60	1.55	1.85	2.42
2	2.50	2.68	2.70	3.32	3.32	3.15	2.35	2.12	1.55	1.55	1.80	2.25
3	2.55	3.75	2.65	3.25	4.20	3.10	2.95	2.08	1.48	1.60	1.72	2.28
4	2.62	3.82	8.05	3.30	3.50	2.90	2.80	2.02	1.85	1.50	1.65	3.45
5	2.82	4.00	4.15	4.25	3.05	2.65	2.75	2.10	1.75	1.55	1.75	3.40
6	2.80	3.58	3.25	4.28	3.15	2.92	2.55	2.05	1.68	1.48	1.88	3.65
7	2.52	3.80	3.05	3.85	3.15	2.58	2.42	2.02	1.65	1.30	1.68	5.90
8	2.68	3.68	2.55	3.38	2.95	3.10	2.20	2.02	1.65	1.38	1.80	4.35
9	2.40	3.70	2.92	3.80	3.25	3.22	2.28	1.85	1.40	1.35	1.70	4.60
10	2.50	3.70	2.65	3.88	4.05	4.05	2.25	1.90	1.55	1.80	1.65	4.95
11	4.22	3.52	2.45	4.45	3.42	4.25	2.22	1.98	1.52	1.90	1.72	4.60
12	3.95	3.65	2.50	4.35	3.20	3.40	2.08	2.10	1.52	1.92	2.50	4.40
13	3.42	3.65	2.30	4.25	3.02	2.90	2.10	2.05	1.55	1.82	2.25	4.75
14	2.82	3.68	2.45	4.48	3.45	2.72	1.98	1.90	1.62	1.68	2.20	4.42
15	2.65	3.68	2.35	8.90	3.02	2.65	1.78	1.80	1.62	1.72	1.88	4.50
16	2.48	3.55	2.40	9.35	2.90	2.52	1.78	1.65	1.48	1.68	1.90	5.55
17	2.88	3.60	2.35	6.10	2.78	2.62	1.95	1.65	1.38	1.60	1.85	5.38
18	2.60	3.32	2.10	5.38	2.72	2.82	2.85	1.50	1.30	1.60	1.82	4.70
19	2.55	3.52	2.30	5.08	2.58	2.58	2.30	1.40	1.40	1.60	4.30	4.45
20	2.32	3.60	2.28	4.90	2.58	2.50	2.15	1.52	1.28	2.52	3.42	4.38
21	3.02	3.85	2.25	4.48	2.48	2.50	2.00	1.70	1.40	3.05	3.15	4.75
22	3.70	6.85	2.22	4.28	2.35	2.32	2.02	1.80	1.55	2.48	3.35	4.90
23	5.38	3.95	2.20	4.05	2.28	2.40	2.10	1.82	1.85	2.22	3.28	......
24	6.50	3.40	2.25	3.80	2.30	4.30	2.40	1.75	1.98	2.12	3.15	......
25	4.15	3.25	2.00	3.70	2.35	3.18	2.18	1.62	1.75	2.00	2.70	......
26	3.58	4.85	2.35	3.40	2.52	2.55	1.90	1.52	1.62	2.28	2.60	......
27	3.32	3.45	6.60	3.25	4.40	2.45	1.92	1.60	1.70	2.10	2.50	......
28	3.05	2.65	5.55	3.15	8.59	2.30	1.82	2.02	1.65	2.02	2.52	......
29	2.92	......	3.90	2.95	6.55	2.32	1.80	1.82	1.65	2.22	2.40	......
30	2.82	......	3.60	2.95	4.82	2.40	2.00	1.75	1.48	1.95	2.40	......
31	2.78	......	3.80	......	4.10	......	2.50	1.65	......	2.08	......	......

Ice conditions January 10–13.

River frozen over solid at bridge February 1 to 22; ice from 03. to 0.75 foot thick; ice went out of river during night of February 22; no ice in river during March, except anchor ice; anchor ice January 1, 2, 7 and 26, February 10 and 11, March 15, 16 and 19.

Ice conditions in December.

Anchor ice running from December 3 to 8; December 9 gage height was to ice surface; on the 17th the river was frozen over solid; ice went out of river December 31.

During the frozen period of January and February, readings were taken to water-surface through hole cut in ice; for December readings were to top of ice.

Discharge Measurements of Hoosic River at Buskirk, N. Y.

DATE.	Hydrographer.	Width.	Area of section.	Gage height.	Discharge.
1906.		*Feet.*	*Square feet.*	*Feet.*	*Second-feet.*
Feb.* 10	Covert and Weeks.......	130	576	3.90	709
Aug. 3	C. C. Covert............	126	377	1.90	336
Aug. 22	C. C. Covert............	126	377	1.86	328
Oct. 10	C. C. Covert............	115	328	1.50	171

Rating table for Hoosic River at Buskirk, N. Y., from September 25, 1903, to December 31, 1906.

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
Feet.	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*
1.20	74	2.40	642	3.60	1,614	4.80	2,985
1.30	106	2.50	704	3.70	1,716	4.90	3,110
1.40	140	2.60	769	3.80	1,822	5.00	3,240
1.50	176	2.70	837	3.90	1,930	5.50	3,905
1.60	216	2.80	909	4.00	2,040	6.00	4,600
1.70	260	2.90	985	4.10	2,150	7.00	6,080
1.80	308	3.00	1,065	4.20	2,265	8.00	7,630
1.90	359	3.10	1,149	4.30	2,380	9.00	9,230
2.00	412	3.20	1,236	4.40	2,495	10.00	10,880
2.10	467	3.30	1,326	4.50	2,615		
2.20	524	3.40	1,419	4.60	2,735		
2.30	582	3.50	1,515	4.70	2,860		

The above table is applicable only for open-channel conditions. It is based on 11 discharge measurements made during 1903–1906. It is fairly well defined between gage heights 1.6 feet and 7 feet.

Mean Daily Discharge, Second-feet, of Hoosic River at Buskirk, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1................	717	......	769	1,560	1,020	1,530	654	704	216	196	334	654
2................	704	......	837	1,340	1,340	1,190	612	478	196	196	308	553
3................	736	......	803	1,280	2,260	1,150	1,020	456	169	216	270	570
4................	783	......	7,710	1,330	1,520	985	909	423	334	176	238	......
5................	924	......	2,210	2,320	1,110	803	873	467	284	196	284	......
6................	909	......	1,280	2,360	1,190	1,000	736	440	251	169	349	......
7................	717	......	1,100	1,880	1,190	756	654	423	238	106	251	......
8................	823	......	736	1,400	1,020	1,150	524	423	238	133	308	......
9................	642	......	1,000	1,820	1,280	1,250	570	334	140	123	260	......
10................	704	......	803	1,910	2,100	2,100	553	359	196	308	238	......
11................	......	......	673	2,460	1,440	2,320	536	401	184	359	270	......
12................	......	......	704	2,440	1,240	1,420	456	467	184	370	176	......
13................	......	......	582	2,320	1,080	985	467	440	196	318	90	......
14................	924	......	673	2,590	1,470	851	401	359	225	251	74	......
15................	803	......	612	9,070	1,080	803	298	308	225	270	349	......
16................	692	......	642	9,810	985	717	298	238	169	251	359	......
17................	970	......	612	4,740	895	783	386	238	133	216	334	......
18................	769	......	467	3,740	851	924	947	176	106	216	318	......
19................	736	......	582	3,340	756	756	582	140	140	216	2,380	......
20................	594	......	570	3,110	756	704	496	184	100	717	1,440	......
21................	1,080	......	553	2,590	692	704	412	260	140	1,110	1,190	......
22................	1,720	......	536	2,360	610	594	423	308	196	692	1,370	......
23................	3,740	1,980	524	2,100	570	642	467	318	334	536	1,310	......
24................	5,330	1,420	553	1,820	582	2,380	642	284	401	478	1,190	......
25................	2,210	1,280	412	1,720	612	1,220	513	225	284	412	837	......
26................	1,590	3,050	612	1,420	717	736	359	184	225	570	769	......
27................	1,340	1,470	5,480	1,280	2,500	673	370	216	260	467	704	......
28................	1,110	803	3,970	1,190	8,570	582	318	423	238	423	717	......
29................	1,000	......	1,930	1,020	5,400	594	308	318	238	536	642	......
30................	924	......	1,610	1,020	3,010	642	412	284	169	386	642	......
31................	895	......	1,820	......	2,150	......	704	238	......	456	......	......

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* River frozen over; ice averaged 0.54 foot thick; considerable needle ice. Gage height to bottom of ice, 3.26.

Monthly Discharge of Hoosic River at Buskirk, N. Y.
[Drainage area, 579 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1906.					
March	7,710	412	1,330	2.30	2.65
April	9,810	1,020	2,580	4.46	4.98
May	8,570	570	1,610	2.78	3.20
June	2,380	582	1,030	1.78	1.99
July	1,020	298	545	.941	1.08
August	704	140	339	.585	.67
September	401	100	214	.370	.41
October	1,110	106	357	.617	.71
November	2,380	74	600	1.04	1.16

HOOSIC RIVER AT HOOSIC FALLS, N. Y.

Mean Daily Gage Height, in Feet, of Hoosic River at Hoosic Falls, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	1.3	0.5	0.3	0.3	0.1	0.5	0.3	0.2
2	......	......	......	......	1.0	0.4	0.5	0.2	0.1	0.5	0.3	0.2
3	......	......	......	1.3	1.0	0.4	0.4	0.3	0.1	0.5	0.3	0.2
4	......	......	......	1.0	0.9	0.5	0.3	0.2	0.3	0.3	0.2	0.3
5	......	......	......	1.0	0.7	0.7	0.3	0.2	0.2	0.3	0.2	0.2
6	......	......	......	0.9	0.7	0.6	0.3	0.2	0.2	0.3	0.3	0.2
7	......	......	......	1.0	0.7	0.6	0.3	0.1	0.1	0.3	0.2	0.2
8	......	......	......	1.1	0.6	0.8	0.3	0.2	0.1	0.3	0.2	0.1
9	......	......	......	1.7	0.5	3.3	0.3	0.1	0.2	0.3	0.1	0.1
10	......	......	......	1.7	0.5	2.0	0.2	0.1	0.2	0.3	0.0	0.1
11	......	......	......	1.5	0.7	1.4	0.3	0.3	0.1	0.3	0.1	0.1
12	......	......	......	1.2	0.6	1.0	0.3	0.3	0.2	0.3	0.2	0.1
13	......	......	......	1.0	0.6	0.9	0.3	0.2	0.2	0.5	0.3	0.1
14	......	......	......	1.0	0.5	0.8	0.3	0.2	0.3	0.4	0.2	0.1
15	......	......	......	0.9	0.5	0.8	0.3	0.3	1.6	0.5	0.2	0.1
16	......	......	......	0.9	0.8	0.7	0.2	0.2	0.9	0.5	0.2	0.1
17	......	......	......	0.9	0.9	0.6	0.2	0.2	0.6	0.5	0.1	0.1
18	......	......	......	0.9	0.9	0.5	0.2	0.2	0.5	0.4	0.1	0.1
19	......	......	......	0.9	0.9	0.5	0.2	0.2	0.5	0.3	0.2	0.1
20	......	......	......	0.9	1.0	0.5	0.2	0.3	0.3	0.3	0.2	0.1
21	......	......	......	0.8	0.9	0.5	0.2	0.7	0.4	0.4	0.3	0.1
22	......	......	......	0.7	0.7	0.5	0.1	0.3	0.4	1.9	0.3	0.1
23	......	......	......	0.7	0.7	0.4	0.1	0.4	0.3	1.1	0.3	0.1
24	......	......	......	0.7	0.5	0.3	0.1	0.3	0.3	0.7	0.3	0.1
25	......	......	......	1.0	0.5	0.3	0.2	0.3	0.3	0.6	0.3	0.2
26	......	......	......	1.0	0.7	0.3	0.2	0.3	0.3	0.6	0.3	0.3
27	......	......	......	0.9	0.7	0.3	0.3	0.1	0.3	0.5	0.3	0.5
28	......	......	......	1.5	0.6	0.3	0.3	0.2	0.3	0.4	0.3	1.3
29	......	......	......	1.4	0.5	0.3	0.3	0.2	0.4	0.4	0.2	0.8
30	......	......	......	1.4	0.6	0.4	0.2	0.1	0.9	0.4	0.3	0.5
31	......	......	......	......	0.5	......	0.2	0.1	......	0.4	......	0.4

Mean Daily Gage Height, in Feet, of Hoosic River at Hoosic Falls, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	0.6	0.3	0.1	2.2	0.5	0.2	0.5	0.7	0.7	0.3	0.3	0.9
2	0.7	0.1	0.1	1.7	0.4	0.1	0.5	0.5	0.5	0.3	0.3	0.9
3	0.7	0.1	0.1	1.3	0.3	0.3	0.5	0.5	1.2	0.3	0.2	2.4
4	0.3	0.1	0.1	1.2	0.3	0.2	0.5	0.3	2.0	0.3	0.2	2.3
5	0.3	0.3	0.2	1.4	0.3	0.1	0.4	0.3	1.6	0.3	0.3	1.2
6	0.5	0.2	0.1	1.7	0.3	0.3	0.3	0.3	1.3	0.3	0.3	1.0
7	1.7	0.2	0.1	1.3	0.5	0.3	0.3	0.5	0.9	0.3	0.6	0.9
8	1.7	0.2	0.1	1.1	0.3	0.3	0.2	0.3	0.8	0.2	0.5	0.8
9	1.0	0.2	0.2	1.1	0.3	0.3	0.2	0.3	0.7	0.2	0.4	0.8
10	0.9	0.2	0.4	1.0	0.5	0.3	0.1	0.3	0.6	0.2	0.3	0.8
11	0.5	0.2	0.6	1.5	0.3	0.2	0.2	0.5	0.5	0.2	0.3	0.7
12	0.7	0.3	0.7	1.8	0.3	0.1	0.1	0.9	0.7	0.5	0.4	0.7
13	1.0	0.2	0.4	1.3	0.3	0.3	0.1	0.7	0.9	0.5	0.3	0.5
14	0.7	0.2	0.4	1.1	0.4	0.3	0.3	0.6	0.7	0.5	0.3	0.4
15	0.7	0.2	0.4	1.0	0.3	0.1	0.1	0.5	0.7	0.4	0.3	0.3
16	0.6	0.1	0.2	0.9	0.4	0.1	0.2	0.8	0.5	0.3	0.3	0.3
17	0.6	0.1	0.3	0.8	0.4	0.1	0.2	0.9	0.5	0.3	0.3	0.3
18	0.5	0.1	0.7	0.7	0.3	0.2	0.1	0.7	0.8	0.3	0.3	0.3
19	0.5	0.1	3.0	0.7	0.5	0.4	0.1	0.6	1.2	0.3	0.3	0.3
20	0.5	0.1	2.3	0.7	0.4	0.5	0.3	0.5	0.9	0.4	0.3	0.3
21	0.4	0.1	1.7	0.7	0.4	0.6	0.3	0.3	1.0	0.5	0.0	0.4
22	0.5	0.1	1.4	0.9	0.3	1.7	0.1	0.3	0.9	0.5	0.1	0.9
23	0.3	0.1	1.3	0.7	0.3	1.1	0.2	0.3	0.7	0.4	0.1	0.8
24	0.2	0.1	1.1	0.5	0.3	0.9	0.2	0.3	0.6	0.3	0.0	0.7
25	0.3	0.1	2.5	0.5	0.3	0.8	0.3	0.3	0.6	0.3	0.1	0.6
26	0.1	0.2	1.8	0.5	0.3	0.9	0.3	0.3	0.5	0.3	0.2	0.5
27	0.1	0.1	2.3	0.4	0.3	0.9	0.2	0.3	0.5	0.3	0.1	0.5
28	0.3	0.1	2.1	0.3	0.3	0.7	0.2	0.3	0.3	0.3	0.1	0.5
29	0.3	......	2.1	0.3	0.3	0.6	0.1	0.3	0.3	0.3	0.5	0.6
30	0.3	......	2.5	0.5	0.3	0.5	0.7	0.3	0.3	0.3	1.2	0.7
31	0.3	......	2.8	......	0.3	......	0.9	1.3	......	0.3	....	0.7

Mean Daily Gage Height, in Feet, of Hoosic River at Hoosic Falls, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	0.7	0.4	0.4	1.0	0.6	0.8	1.0	0.4	0.05	0.1	0.2	0.4
2	0.6	0.4	0.4	0.8	0.5	0.8	0.8	0.3	0.2	—0.1	0.1	0.4
3	0.6	0.4	0.4	0.7	0.9	0.7	0.8	0.2	0.2	—0.6	0.2	0.3
4	0.6	0.5	2.5	0.6	0.8	0.6	0.8	0.2	0.2	—0.6	0.2	0.1
5	0.7	0.4	1.0	1.0	0.8	0.6	0.8	0.2	0.0	—0.1	—0.2	0.1
6	0.6	0.2	1.0	1.0	0.6	0.6	0.6	0.2	0.1	0.0	0.2	0.2
7	0.6	0.2	0.6	0.9	0.6	0.7	0.6	0.2	0.0	0.0	0.0	0.6
8	0.5	0.2	0.6	0.8	0.6	0.6	0.5	0.2	0.05	—0.05	0.1	0.4
9	0.4	0.2	0.6	0.8	0.6	0.7	0.4	0.2	0.05	—0.1	—0.05	0.3
10	0.4	0.2	0.6	0.8	1.0	1.0	0.4	0.2	0.05	0.05	0.2	0.4
11	0.4	0.2	0.6	1.2	0.8	1.0	0.4	0.2	0.05	0.2	0.4	0.4
12	0.4	0.2	0.6	1.2	0.7	0.8	0.3	0.5	—0.1	0.0	0.4	0.2
13	0.6	0.3	0.6	1.0	0.8	0.8	0.3	0.4	—0.1	—0.1	0.3	0.3
14	0.4	0.4	0.5	1.2	0.7	0.5	0.3	0.2	—0.1	0.2	0.2	0.2
15	0.4	0.3	0.4	2.8	0.6	0.4	0.2	0.2	—0.1	0.1	0.2	0.2
16	0.6	0.2	0.3	2.7	0.6	0.5	0.2	0.1	0.1	—0.05	0.3	0.7
17	0.6	0.2	0.3	1.7	0.5	0.6	0.2	0.05	—0.4	—0.05	0.2	0.5
18	0.6	0.2	0.3	1.4	0.4	0.6	0.8	0.05	0.0	—0.2	0.4	0.4
19	0.6	0.2	0.3	1.2	0.4	0.4	0.4	0.05	—1.8	—0.2	1.2	0.4
20	0.4	0.3	0.2	1.2	0.4	0.4	0.4	0.0	—1.0	0.4	1.0	0.4
21	0.6	0.8	0.2	1.1	0.4	0.4	0.2	0.1	0.05	0.8	0.7	0.4
22	1.0	1.9	0.2	1.6	0.3	0.3	0.2	0.2	—0.1	0.4	0.8	0.4
23	1.6	1.4	0.2	0.9	0.2	0.4	0.2	0.2	0.4	0.3	0.6	0.3
24	1.8	0.8	0.2	0.9	0.2	1.0	0.3	0.2	0.2	0.2	0.6	0.3
25	1.1	1.0	0.2	0.8	0.3	0.8	0.4	0.2	0.1	0.2	0.6	0.2
26	1.1	1.2	0.2	0.7	0.4	0.6	0.2	0.2	0.1	0.4	0.6	0.2
27	0.9	0.8	1.6	0.7	0.8	0.4	0.2	0.1	0.0	0.4	0.4	0.2
28	0.7	0.6	1.6	0.6	2.1	0.4	0.2	0.2	0.0	0.2	0.4	0.2
29	0.7	......	1.0	0.6	1.6	0.4	0.4	0.4	0.1	0.2	0.4	0.2
30	0.8	......	1.0	0.5	1.3	0.4	0.2	0.2	0.1	0.1	0.4	0.5
31	0.5	......	1.0	......	0.9	......	0.6	0.1	......	0.2	......	0.7

HUDSON RIVER AT SCHUYLERVILLE, N. Y.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River at Ferry St., Schuylerville, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	......	......	......	......	......	82.5	83.6	83.4	85.6
2	......	......	......	......	......	......	......	......	82.8	84.0	83.6	85.2
3	......	......	......	......	......	......	......	......	83.2	83.8	84.1	86.7
4	......	......	......	......	......	......	......	......	84.0	83.8	84.2	88.3
5	......	......	......	......	......	......	......	......	87.0	83.6	84.4	87.4
6	......	......	......	......	......	......	......	......	88.6	83.4	84.6	87.0
7	......	......	......	......	......	......	......	......	88.0	83.3	84.5	86.6
8	......	......	......	......	......	......	......	......	87.2	82.8	84.9	86.4
9	......	......	......	......	......	......	......	......	86.9	83.6	85.0	86.0
10	......	......	......	......	......	......	......	......	86.2	83.3	84.6	85.8
11	......	......	......	......	......	......	......	......	85.8	83.0	84.6	85.6
12	......	......	......	......	......	......	......	......	85.3	83.2	83.8	85.4
13	......	......	......	......	......	......	......	......	85.7	83.6	84.0	85.9
14	......	......	......	......	......	......	......	83.4	85.6	84.8	83.9	85.8
15	......	......	......	......	......	......	......	83.2	84.7	84.2	83.8	85.8
16	......	......	......	......	......	......	......	83.4	84.4	84.4	83.6	85.6
17	......	......	......	......	......	......	......	84.1	84.0	84.2	83.7	85.0
18	......	......	......	......	......	......	......	84.6	85.2	83.6	83.6	84.6
19	......	......	......	......	......	......	......	84.4	87.1	83.6	83.2	84.9
20	......	......	......	......	......	......	......	83.7	87.7	83.6	83.6	84.8
21	......	......	......	......	......	......	......	83.7	88.0	84.2	83.0	85.0
22	......	......	......	......	......	......	......	83.3	87.8	84.3	83.0	85.5
23	......	......	......	......	......	......	......	83.4	87.1	84.5	83.0	85.6
24	......	......	......	......	......	......	......	83.2	86.4	84.2	82.9	85.6
25	......	......	......	......	......	......	......	83.2	85.9	83.8	83.3	85.4
26	......	......	......	......	......	......	......	83.0	85.2	83.6	83.0	85.4
27	......	......	......	......	......	......	......	81.5	84.7	83.6	83.8	85.2
28	......	......	......	......	......	......	......	82.8	84.6	83.4	84.1	85.2
29	......	......	......	......	......	......	......	82.6	84.4	83.0	84.2	85.2
30	......	......	......	......	......	......	......	82.5	84.0	83.9	85.4	85.6
31	......	......	......	......	......	......	......	82.5	......	83.6	......	85.6

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River at Ferry St., Schuylerville, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	85.9	86.2	86.0	87.0	87.4	87.6	85.4	84.8	84.4	84.2	85.0	85.4
2	85.6	86.1	85.5	87.0	87.2	87.2	87.4	84.8	84.2	84.3	85.0	85.3
3	85.2	86.8	85.6	86.9	88.0	86.8	87.0	84.8	84.0	84.2	85.0	85.3
4	85.2	85.4	89.6	87.1	88.0	86.5	86.6	84.8	84.4	84.2	84.5	85.5
5	85.6	85.8	89.0	87.6	88.0	86.0	86.5	84.4	84.2	84.1	84.6	84.9
6	85.7	85.8	87.7	87.6	87.7	85.6	86.2	84.6	84.2	84.2	84.6	84.7
7	85.7	85.8	87.4	87.6	87.6	85.6	86.1	84.7	84.8	83.9	84.4	84.9
8	85.6	85.6	86.9	87.3	87.2	85.8	85.4	84.6	84.6	84.2	84.5	85.3
9	85.7	85.5	86.6	87.2	87.4	86.0	85.6	84.6	84.4	84.2	84.6	85.3
10	85.7	85.5	86.4	87.1	87.6	86.6	85.4	84.4	84.5	84.2	84.5	85.2
11	85.6	85.5	86.0	86.8	87.3	86.8	85.2	84.4	84.4	84.2	84.2	85.0
12	85.6	85.5	86.0	86.9	86.2	87.6	85.2	84.2	84.4	84.2	84.5	84.9
13	85.8	85.5	85.5	87.0	86.7	86.4	85.2	84.3	84.4	84.3	84.7	84.9
14	85.6	85.5	85.4	87.6	87.3	86.0	85.0	84.4	84.2	83.9	84.8	84.9
15	85.6	85.5	84.8	89.0	88.2	85.8	84.6	84.2	84.1	84.0	84.4	84.9
16	85.7	85.5	85.6	91.8	87.4	86.0	85.2	84.0	84.0	84.0	84.5	84.9
17	86.2	85.5	85.2	92.3	87.1	85.8	85.0	83.9	84.0	84.0	84.6	85.0
18	85.7	85.4	85.0	92.2	86.7	86.4	84.9	83.7	84.2	84.5	84.4	85.5
19	85.4	85.3	85.3	92.1	86.6	86.4	84.8	83.5	84.2	84.6	84.8	85.5
20	85.2	85.3	85.4	92.2	86.6	86.2	84.8	84.4	84.2	84.2	85.4	85.4
21	85.3	85.4	85.0	92.4	85.6	85.8	84.4	84.2	84.3	84.4	85.6	85.3
22	86.0	86.0	85.0	91.8	86.2	85.6	84.0	84.3	84.2	85.4	85.8	85.3
23	86.4	85.6	84.8	91.8	86.0	85.6	84.5	84.4	84.1	85.3	86.0	85.1
24	88.4	86.2	85.0	91.4	85.6	85.7	84.8	84.4	84.2	85.1	86.0	85.0
25	89.0	86.0	84.6	90.2	86.1	86.1	84.5	84.6	84.2	85.0	85.6	85.1
26	88.7	87.2	84.7	89.5	86.4	85.6	84.5	84.4	84.3	85.2	85.8	84.9
27	88.4	86.0	85.8	88.8	87.4	85.4	84.4	84.8	84.3	85.0	85.6	85.0
28	87.9	86.3	87.2	88.1	89.2	85.3	84.4	84.9	84.3	85.0	85.5	84.9
29	87.6	......	87.0	87.7	89.5	85.2	84.2	84.7	84.2	85.2	85.5	84.9
30	87.1	......	86.8	87.7	88.7	85.0	84.6	84.6	84.0	85.2	85.6	84.7
31	86.4	......	87.2	......	88.2	......	84.8	84.5	......	85.0	......	85.4

HUDSON RIVER AT FREE BRIDGE, NEAR LIBERTY MILLS, WASHINGTON COUNTY, N. Y.

A meter gaging station was established at the highway bridge over the Hudson river near Liberty Mills, October 23, 1905, by C. A. Poole.

This bridge, which is commonly known as "Free Bridge," is about three-quarters of a mile south of the State dam at Northumberland and about one-quarter of a mile north of the mouth of the Batten kill. The entire yield of the watershed passes the station, except that diverted at the dam at Northumberland for the supply of the Champlain canal, and that passing northerly from Glens Falls feeder.

The gage is of the weight-and-chain type, and is attached to the lower chord of the north truss of the east span at first panel point from pier.

The datum to which all gage readings are added is 83.12, which is the elevation of bottom of weight when the end of chain is opposite the zero of the gage. Observations of the stage of the stream are taken twice each day by Wm. Dunstan.

Current-meter measurements have been made from the bridge, which consists of three spans, with a total length of 426.2 feet between abutments.

The river channel is partly of rock and partly of gravel and of uniform cross-section under the bridge. About 400 feet below the bridge are rapids. The channel is straight for several hundred feet below the bridge to a point where the stream is divided by an island. Above the bridge the river bends slightly to the south. The current is somewhat sluggish during low water.

List of Discharge Measurements of Hudson River at Liberty Mills, N. Y.

DATE.	Hydrographer.	Gage height.	Elevation of water-surface.	Width.	Area of section.	Mean velocity.	Discharge.
		Feet.		*Feet.*	*Square feet.*	*Ft. per second.*	*Second-feet.*
1905.							
Oct. 14	....	3.3	86.42	400.0	2,735	2.34	6,391
Nov. 13	....	2.8	85.92	398.0	2,535	2.00	5,081
1906.							
April 20	C. A. Poole.........	10.3	93.4	405.6	5,574.4	4.14	23,101
April 25	L. R. Ellis..........	8.4	91.5	399.5	4,743.8	3.45	16,363
April 27	L. R. Ellis..........	6.8	89.9	399.5	4,099.3	2.67	10,937
April 29	L. R. Ellis..........	5.5	88.6	393.4	3,540.4	3.11	11,000
April 30	C. A. Poole..........	5.4	88.5	403	3,588.8	2.93	10,505
May 2	C. A. Poole..........	5.0	88.1	403	3,387.6	2.95	10,004
May 4	L. R. Ellis..........	5.9	89.0	394.4	3,701.3	2.87	10,621
May 15	C. A. Poole.........	6.2	89.3	402.3	3,832.5	3.70	14,303
May 22	C. A. Poole.........	3.92	87.04	392.6	2,903.2	2.36	6,843
June 1	C. A. Poole.........	5.60	88.72	400.1	3,627.4	2.82	10,239
June 11	J. H. McCormick....	4.6	87.7	395.9	3,218.1	2.51	8,069

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River at Liberty Mills, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	......	......	......	......	......	......	......	......	......	......	85.1	86.6
2	......	......	......	......	......	......	......	......	......	......	85.0	86.2
3	......	......	......	......	......	......	......	......	......	......	85.4	87.9
4	......	......	......	......	......	......	......	......	......	......	86.0	88.9
5	......	......	......	......	......	......	......	......	......	......	85.7	88.3
6	......	......	......	......	......	......	......	......	......	......	86.2	87.8
7	......	......	......	......	......	......	......	......	......	......	86.2	87.6
8	......	......	......	......	......	......	......	......	......	......	86.6	87.4
9	......	......	......	......	......	......	......	......	......	......	86.6	87.0
10	......	......	......	......	......	......	......	......	......	......	86.4	86.6
11	......	......	......	......	......	......	......	......	......	......	86.3	86.2
12	......	......	......	......	......	......	......	......	......	......	86.0	85.8
13	......	......	......	......	......	......	......	......	......	......	85.8	85.8
14	......	......	......	......	......	......	......	......	......	......	85.8	85.9
15	......	......	......	......	......	......	......	......	......	......	85.7	85.8
16	......	......	......	......	......	......	......	......	......	......	85.6	85.9
17	......	......	......	......	......	......	......	......	......	......	85.4	85.3
18	......	......	......	......	......	......	......	......	......	......	85.4	84.8
19	......	......	......	......	......	......	......	......	......	......	85.1	85.7
20	......	......	......	......	......	......	......	......	......	......	85.3	85.5
21	......	......	......	......	......	......	......	......	......	......	84.8	85.5
22	......	......	......	......	......	......	......	......	......	......	84.8	86.5
23	......	......	......	......	......	......	......	......	......	85.9	84.8	86.6
24	......	......	......	......	......	......	......	......	......	85.7	84.4	85.6
25	......	......	......	......	......	......	......	......	......	85.5	84.8	85.5
26	......	......	......	......	......	......	......	......	......	85.3	84.5	85.4
27	......	......	......	......	......	......	......	......	......	85.2	85.2	85.4
28	......	......	......	......	......	......	......	......	......	85.2	84.9	85.4
29	......	......	......	......	......	......	......	......	......	84.8	85.2	85.4
30	......	......	......	......	......	......	......	......	......	85.4	86.3	85.6
31	......	......	......	......	......	......	......	......	......	85.2	......	86.4

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River at Liberty Mills, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	86.5	88.4	86.9	87.9	88.3	88.6	86.6	85.2	84.7	84.6	85.4	86.1
2	86.2	88.5	86.3	87.8	88.3	88.1	88.2	85.4	84.2	84.6	85.2	85.8
3	86.4	88.1	87.6	87.8	88.9	87.5	87.9	85.2	84.3	84.5	85.3	85.7
4	86.5	85.9	90.9	87.9	88.9	87.2	87.5	85.1	84.8	84.5	84.8	86.2
5	86.4	85.4	90.2	88.5	89.0	86.7	87.3	84.6	84.4	84.4	84.9	85.2
6	86.4	85.2	88.7	88.6	88.8	86.4	87.0	84.8	84.4	84.6	84.8	85.2
7	86.4	86.4	88.1	88.5	88.5	86.3	86.8	85.1	85.2	84.2	84.6	85.4
8	86.6	86.6	87.6	88.2	88.0	86.5	86.3	85.0	85.0	84.5	85.0	85.7
9	86.5	87.2	87.3	87.9	88.3	86.7	86.2	85.0	84.5	84.5	84.7	84.9
10	86.4	87.7	86.9	87.9	88.5	87.6	85.9	84.7	84.8	84.5	84.8	85.2
11	86.2	87.0	86.7	87.7	88.1	87.6	85.9	84.6	84.8	84.6	84.6	85.4
12	86.3	87.4	87.0	87.8	87.8	88.6	85.9	84.3	84.8	84.6	84.9	85.3
13	86.1	87.2	86.4	87.8	87.6	87.2	85.4	84.4	84.6	84.6	84.9	85.2
14	86.3	87.1	86.0	88.6	88.1	86.8	85.5	84.5	84.5	84.3	85.3	85.1
15	86.3	86.9	85.7	90.9	89.1	86.5	84.9	84.6	84.4	84.3	84.7	85.3
16	86.2	86.8	85.3	93.4	88.5	86.5	85.5	84.1	84.0	84.4	84.9	85.2
17	86.5	86.6	85.5	93.7	87.7	86.5	85.5	84.1	84.6	84.6	85.0	85.6
18	86.3	86.3	85.4	93.5	87.6	86.9	85.4	84.0	84.4	84.7	84.7	86.4
19	85.7	86.3	85.7	93.4	87.6	87.0	84.1	83.9	84.6	84.7	85.6	86.4
20	85.3	86.4	85.7	93.5	87.5	86.7	85.1	84.5	84.5	84.8	86.0	86.3
21	86.2	86.8	85.6	93.4	86.8	86.3	84.4	84.5	84.6	84.7	86.3	86.0
22	86.6	87.4	85.4	93.1	86.9	86.1	84.1	84.9	84.6	86.0	86.6	86.0
23	87.5	87.9	85.6	92.8	86.4	86.1	84.6	84.7	84.4	85.7	86.9	85.5
24	89.8	87.6	85.6	92.3	86.6	86.5	85.1	84.8	84.6	85.5	86.8	85.7
25	90.2	87.2	84.9	91.4	86.7	86.6	84.9	85.1	84.6	85.5	86.1	85.7
26	89.6	87.7	85.0	90.7	87.5	86.2	84.8	84.8	84.6	85.5	86.5	85.3
27	89.7	88.2	86.4	89.3	88.5	86.1	84.6	85.1	84.6	85.4	86.2	85.7
28	88.6	87.9	87.9	89.2	90.5	85.9	84.5	85.4	84.6	85.0	86.1	85.5
29	88.7	......	87.9	88.6	91.2	85.5	84.2	84.9	84.5	85.8	86.3	85.2
30	88.2	......	87.8	88.5	89.8	85.5	84.9	84.9	84.5	85.5	86.3	85.3
31	88.3	......	88.1	......	89.5	......	85.1	84.9	......	85.5	......	86.0

HUDSON RIVER ABOVE DAM AT NORTHUMBERLAND, N. Y.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River above Dam at Northumberland, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	107.2	104.3	104.1	104.2	102.9	105.2	104.5	103.9
2	......	......	......	......	106.8	104.4	104.8	103.2	102.5	105.7	104.4	104.1
3	......	......	......	......	106.6	104.2	104.2	102.7	102.6	105.1	104.3	104.2
4	......	......	......	......	106.5	104.1	104.6	102.7	103.3	104.8	104.2	103.7
5	......	......	......	......	106.2	104.4	104.3	102.7	103.3	104.6	104.1	104.2
6	......	......	......	......	105.8	104.4	103.8	103.7	104.2	104.5	104.4	103.6
7	......	......	......	......	105.5	105.1	104.2	104.9	103.7	104.5	104.2	103.6
8	......	......	......	......	105.3	104.6	104.0	104.5	103.4	104.0	103.9	104.2
9	......	......	......	......	105.0	105.3	103.8	103.6	103.7	104.6	104.0	103.9
10	......	......	......	......	104.9	105.9	104.1	102.7	102.5	104.3	103.7	103.9
11	......	......	......	107.9	104.4	105.7	104.3	102.6	104.0	104.3	103.1	104.4
12	......	......	......	107.5	104.3	106.1	102.8	102.8	104.1	104.8	103.9	104.0
13	......	......	......	107.1	104.2	105.5	102.5	102.6	103.0	104.9	104.4	104.1
14	......	......	......	106.5	104.5	105.1	103.0	104.0	102.8	104.7	100.9	103.8
15	......	......	......	105.9	104.7	104.8	103.8	103.6	104.3	104.6	103.3	103.6
16	......	......	......	105.3	104.4	104.6	104.0	102.6	103.7	104.1	104.3	103.5
17	......	......	......	105.4	104.8	104.5	104.2	102.4	102.9	104.5	104.1	103.6
18	......	......	......	105.1	105.4	104.3	104.1	102.4	104.1	104.2	104.2	101.8
19	......	......	......	104.9	104.9	104.7	102.6	102.6	104.3	104.1	104.2	103.5
20	......	......	......	104.6	105.3	104.3	102.6	102.7	103.7	103.9	103.9	102.6
21	......	......	......	104.4	105.1	103.6	102.8	104.3	103.4	104.4	104.1	102.3
22	......	......	......	104.3	105.4	104.1	102.5	105.1	103.0	106.6	104.2	102.1
23	......	......	......	104.2	105.1	104.0	102.5	105.3	102.9	107.3	104.0	102.0
24	......	......	......	104.5	104.8	103.9	104.2	105.2	102.6	106.8	104.1	102.6
25	......	......	......	104.6	104.5	103.6	103.3	105.0	104.3	106.2	103.3	102.1
26	......	......	......	105.1	104.1	104.3	102.5	104.8	104.4	105.9	104.2	103.6
27	......	......	......	105.3	104.7	104.3	102.4	104.5	104.7	105.5	104.4	103.7
28	......	......	......	105.7	104.8	103.5	102.3	104.6	104.1	105.2	104.2	104.3
29	......	......	......	106.4	105.0	102.9	103.0	104.1	104.6	105.0	104.2	104.3
30	......	......	......	106.8	104.8	102.9	102.5	103.5	104.8	105.3	104.2	104.1
31	......	......	......	......	104.4	......	104.5	102.5	......	104.8	......	104.2

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River above Dam at Northumberland, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	104.5	102.4	102.2	108.7	105.1	103.6	105.4	105.3	103.3	104.9	103.3	103.8
2	104.5	102.6	102.0	108.2	105.1	104.1	105.9	105.3	104.4	104.7	103.5	103.6
3	104.3	102.3	101.9	107.4	104.9	104.0	106.5	105.0	105.0	104.6	103.7	104.4
4	104.1	102.3	102.0	106.4	104.8	103.6	106.8	104.9	105.9	104.5	103.7	104.5
5	103.9	103.6	101.9	106.2	104.7	104.1	106.7	104.6	106.6	104.2	103.9	104.4
6	103.7	103.3	102.9	106.6	104.7	103.6	106.4	104.9	106.9	104.2	104.0	104.3
7	104.1	102.5	102.2	106.9	105.0	103.4	106.0	104.4	106.6	104.0	103.8	104.2
8	104.7	102.6	102.1	106.2	104.7	104.4	105.7	104.2	106.2	104.3	104.1	104.2
9	104.3	102.5	102.3	106.0	104.5	105.0	105.6	104.4	105.9	103.9	104.1	104.1
10	104.0	102.6	102.2	106.1	104.6	106.2	105.3	104.3	106.0	103.3	104.0	104.2
11	103.9	102.4	102.0	105.1	104.5	106.0	104.9	104.2	105.6	103.5	103.9	103.7
12	103.9	102.3	102.7	105.5	104.4	105.0	104.9	104.3	105.2	103.9	103.8	103.4
13	103.7	102.7	102.6	105.6	104.4	105.0	104.8	104.2	105.3	104.4	103.7	103.5
14	103.8	102.5	101.9	106.7	104.7	105.1	104.7	104.1	105.1	105.0	103.6	103.6
15	104.1	102.5	101.8	106.5	104.2	104.9	101.7	104.5	104.9	104.9	103.6	103.7
16	103.8	102.4	101.8	105.8	104.9	104.9	104.9	104.9	104.7	104.9	103.5	103.4
17	102.0	102.2	101.9	105.1	104.6	104.6	104.7	105.0	105.1	104.4	103.5	103.0
18	103.0	102.3	102.1	104.8	104.7	104.8	104.2	105.0	105.3	104.3	103.5	102.9
19	103.6	101.3	102.4	104.5	104.7	105.2	104.4	105.0	105.8	103.9	103.6	103.3
20	103.8	102.4	103.6	104.5	104.6	104.8	104.4	105.0	106.1	103.5	103.7	103.3
21	103.0	102.5	104.0	104.7	105.0	105.6	104.3	104.5	106.3	103.7	103.4	103.5
22	103.8	102.1	104.3	105.5	104.8	106.6	103.9	104.5	106.2	104.1	103.3	103.5
23	103.7	102.1	104.2	106.3	104.5	106.5	104.7	104.5	105.8	103.8	103.2	103.6
24	103.2	102.0	104.2	105.9	104.4	106.1	104.1	104.4	105.9	103.6	103.1	103.6
25	103.6	102.4	104.6	105.7	104.2	106.2	103.5	104.5	105.6	103.5	103.2	103.6
26	102.9	102.8	105.5	105.3	103.7	105.9	103.5	104.4	105.2	103.4	103.4	103.5
27	102.9	103.2	105.6	105.2	104.5	106.0	104.3	104.4	104.8	103.4	103.4	103.4
28	102.8	102.2	......	105.0	104.9	106.2	103.3	104.2	104.7	103.4	103.3	103.3
29	102.1	......	105.3	104.8	104.4	106.0	103.2	104.0	104.6	103.6	103.3	103.4
30	103.5	......	106.0	105.2	104.1	105.7	104.8	103.2	104.5	103.6	103.6	103.4
31	102.2	......	107.5	......	103.7	......	104.4	103.3	......	103.3	......	103.9

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River above Dam at Northumberland, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	103.8	103.8	103.4	104.4	104.4	104.2	103.3	102.6	102.8	102.4	103.0	103.4
2	103.5	103.7	103.2	104.2	104.6	104.1	104.4	102.8	103.0	102.4	102.8	103.6
3	103.8	104.0	103.4	104.2	104.6	104.1	104.5	102.8	102.7	102.4	102.7	103.2
4	103.8	104.2	104.7	104.4	104.8	103.6	104.0	102.8	102.8	102.0	102.8	103.6
5	103.6	104.3	104.6	104.6	104.8	103.5	103.8	103.2	102.5	102.3	102.6	103.6
6	103.8	103.4	104.0	104.6	105.0	103.3	103.6	103.0	102.6	102.4	102.4	103.6
7	103.8	103.2	104.0	104.5	104.7	103.4	103.6	102.6	102.5	102.8	102.5	102.8
8	103.8	103.2	103.8	104.8	104.6	103.4	103.4	102.6	102.4	102.6	102.3	103.0
9	103.7	103.2	103.8	104.5	104.5	103.4	103.2	102.6	102.9	102.4	102.4	102.9
10	103.5	103.2	103.8	104.3	104.4	104.4	103.2	102.6	102.8	102.4	102.4	102.8
11	103.6	103.4	103.9	104.1	104.5	104.6	103.1	102.6	102.6	102.4	102.8	102.8
12	103.5	103.3	103.6	104.0	104.4	104.6	103.1	103.2	102.3	102.4	102.8	102.4
13	103.5	103.4	103.4	104.2	104.6	103.8	103.1	103.2	102.4	102.2	102.8	102.4
14	103.6	103.2	103.0	104.3	104.8	103.8	103.2	102.4	102.6	103.0	102.8	102.6
15	103.6	103.1	103.7	105.8	105.0	103.6	103.1	102.4	102.8	102.6	102.7	102.6
16	103.5	103.1	103.4	106.5	104.5	103.6	103.0	102.1	102.8	102.5	102.8	102.6
17	103.5	103.0	103.0	107.0	104.4	103.9	102.8	102.2	102.6	102.4	102.8	103.5
18	103.5	103.0	103.2	106.8	104.3	103.8	102.7	102.2	102.4	102.2	103.1	102.9
19	103.4	103.6	103.0	106.8	104.4	103.7	102.6	103.0	102.4	102.2	103.0	102.7
20	103.4	103.2	103.0	106.9	104.3	103.6	102.6	102.6	102.4	102.3	103.1	102.9
21	103.4	103.1	103.0	106.9	104.2	103.5	102.6	102.6	102.5	103.0	103.1	102.7
22	103.6	103.4	102.8	107.2	103.8	103.5	102.6	102.8	102.4	103.0	103.2	102.9
23	104.0	103.4	102.4	106.8	103.5	103.6	102.6	102.6	102.8	103.0	103.5	102.7
24	105.4	103.4	102.9	106.6	103.4	103.8	102.6	102.8	102.4	103.0	103.6	102.9
25	105.6	103.6	103.0	106.2	103.8	103.5	102.5	102.7	102.4	102.9	104.0	102.1
26	105.4	103.7	102.9	105.5	103.8	103.4	102.4	103.2	102.4	102.9	103.2	102.9
27	105.3	103.7	103.2	105.1	104.5	103.4	102.4	102.8	102.6	102.8	103.1	102.7
28	105.2	103.7	103.9	104.9	105.2	103.3	102.6	102.8	102.5	103.2	103.2	102.6
29	105.1	......	104.0	105.0	105.4	103.2	102.4	102.9	102.4	103.2	103.2	102.5
30	104.4	......	104.2	104.6	104.5	103.2	102.7	102.8	102.7	103.0	103.4	102.9
31	103.8	......	104.4	......	104.4	......	102.8	102.8	......	102.9	......	102.8

HUDSON RIVER AT HILL ST., BELOW FORT MILLER, N. Y.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River below Fort Miller, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	108.0	104.5	104.2	104.3	102.9	105.5	104.7	103.9
2	......	......	......	......	107.7	104.6	104.9	103.7	102.8	105.9	104.5	103.9
3	......	......	......	......	107.6	104.3	104.7	102.9	102.7	105.6	104.4	103.7
4	......	......	......	......	107.5	104.3	104.7	102.7	103.3	105.1	104.3	103.7
5	......	......	......	......	107.0	104.6	104.5	102.8	103.9	104.9	104.3	104.1
6	......	......	......	......	106.5	104.5	104.0	103.9	104.3	104.7	104.6	103.6
7	......	......	......	......	106.2	105.3	104.3	105.1	103.8	104.5	104.2	103.5
8	......	......	......	......	105.7	104.8	104.1	104.6	103.5	104.3	104.0	104.1
9	......	......	......	......	105.4	105.5	104.0	103.7	103.9	104.7	104.1	103.9
10	......	......	......	......	105.3	106.3	104.3	102.8	102.7	102.7	103.8	104.1
11	......	......	......	109.1	104.9	106.0	104.5	102.8	104.1	104.5	103.3	104.1
12	......	......	......	108.7	104.7	106.3	103.0	102.9	104.1	104.9	104.0	104.1
13	......	......	......	108.1	104.5	105.7	102.9	102.7	103.0	105.0	104.5	103.9
14	......	......	......	107.3	104.7	105.3	103.3	104.1	102.9	104.9	104.1	103.7
15	......	......	......	106.7	104.9	104.9	103.9	103.6	104.1	104.7	103.7	103.8
16	......	......	......	105.9	104.7	104.7	104.1	102.9	103.7	105.1	104.2	103.5
17	......	......	......	105.8	105.1	104.7	104.3	102.6	103.1	101.8	104.1	103.2
18	......	......	......	105.5	105.5	104.5	104.3	102.5	104.1	104.3	104.0	101.9
19	......	......	......	105.3	105.3	104.7	102.7	102.9	104.4	101.3	104.1	102.0
20	......	......	......	105.1	105.7	104.4	102.7	102.9	103.8	104.1	103.9	102.5
21	......	......	......	104.8	105.5	103.7	102.9	104.4	103.5	101.5	104.3	102.3
22	......	......	......	104.7	105.8	104.3	102.6	105.3	103.1	106.8	104.1	102.2
23	......	......	......	104.5	105.5	104.1	102.7	105.5	103.1	107.9	103.9	102.0
24	......	......	......	104.9	105.0	104.0	104.3	105.4	102.9	107.4	104.1	102.5
25	......	......	......	105.0	104.8	103.7	103.4	105.1	104.5	106.7	103.3	102.1
26	......	......	......	105.6	104.9	104.5	102.6	104.9	104.6	106.3	104.2	103.9
27	......	......	......	105.9	104.9	101.4	102.5	104.6	104.9	105.9	104.3	102.9
28	......	......	......	106.3	105.1	103.7	102.5	104.7	104.7	105.5	104.1	104.3
29	......	......	......	107.3	105.2	102.7	103.1	104.1	104.7	105.3	104.1	104.3
30	......	......	......	107.8	104.9	103.1	102.7	103.6	104.9	105.5	104.1	103.8
31	......	......	......	......	104.5	......	104.7	102.7	......	104.9	......	103.1

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River below Fort Miller, N. Y.

DAY	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	104.5	102.5	102.4	110.6	105.0	104.8	105.4	105.4	103.2	104.8	103.2	103.6
2	104.5	103.0	102.4	109.5	105.2	105.0	105.7	105.3	104.2	104.6	103.4	103.6
3	104.4	102.6	102.3	107.4	104.6	104.9	106.6	105.0	105.0	104.5	103.7	104.4
4	104.3	102.6	102.5	106.8	104.8	105.0	107.1	104.8	105.8	104.3	103.6	104.8
5	104.0	103.8	102.2	107.0	104.8	104.6	106.9	104.6	106.8	104.2	103.9	104.6
6	103.6	103.6	103.0	107.4	104.7	104.3	106.6	104.8	107.2	103.8	103.8	104.4
7	104.1	103.2	102.4	107.8	105.0	103.8	106.2	104.4	107.0	103.8	103.8	104.4
8	104.6	102.6	102.4	107.0	105.2	104.8	105.8	104.0	106.6	104.1	104.1	104.2
9	104.4	102.0	102.5	106.4	104.5	105.0	105.7	104.4	106.0	103.8	104.1	104.0
10	103.7	102.2	102.5	105.9	104.4	106.4	105.4	104.1	106.0	103.5	104.0	104.1
11	104.0	102.1	102.2	105.6	104.2	105.6	104.8	104.2	105.4	103.4	104.0	103.8
12	103.7	102.0	103.0	106.1	104.0	105.1	104.8	104.0	105.0	103.3	103.9	103.4
13	103.8	101.8	102.9	106.1	104.6	104.9	104.6	104.4	105.3	104.0	103.8	103.4
14	104.0	102.0	102.3	106.2	105.0	105.2	104.6	104.4	105.2	104.8	103.5	103.4
15	104.1	102.0	102.2	106.1	104.6	105.0	104.6	104.4	104.8	104.8	103.6	103.4
16	103.6	101.8	102.1	106.2	104.6	104.8	104.7	104.5	104.6	104.6	103.5	103.2
17	103.4	101.7	102.4	106.2	105.0	104.8	104.5	104.8	105.0	104.4	103.4	103.2
18	103.4	101.5	102.2	105.6	105.0	105.0	104.1	105.0	105.3	104.2	103.4	102.8
19	103.3	102.8	102.1	103.7	104.8	105.9	104.4	104.9	105.8	103.8	103.4	103.2
20	103.2	102.9	103.6	104.4	104.8	105.8	104.4	104.8	106.4	103.4	103.3	103.0
21	103.0	103.0	104.0	104.5	105.0	106.5	104.3	104.6	106.6	103.7	103.0	102.8
22	103.8	102.4	104.2	105.7	105.0	107.0	104.1	104.4	106.5	104.0	103.0	102.6
23	104.2	102.4	104.2	106.6	104.8	106.6	104.4	104.4	106.0	103.8	103.0	103.1
24	103.4	102.4	104.2	106.4	104.6	106.3	104.1	104.3	106.0	103.6	102.8	103.6
25	102.9	102.4	104.8	106.0	104.8	106.2	103.8	104.2	105.5	103.5	103.0	103.4
26	102.4	103.0	105.6	105.4	104.3	105.8	103.4	104.2	105.2	103.4	103.4	103.4
27	102.4	103.2	105.8	105.3	104.8	106.0	104.1	104.4	104.7	103.3	103.2	103.4
28	102.0	102.4	105.6	105.1	105.0	106.2	103.8	104.1	104.8	103.2	103.0	103.2
29	102.3	......	106.0	104.9	104.9	106.0	103.4	103.8	104.5	103.4	103.1	103.1
30	103.0	......	107.4	105.2	104.7	105.7	104.3	103.1	104.4	103.4	103.4	103.2
31	102.4	......	109.3	......	104.6	......	104.4	103.1	......	103.3	......	103.2

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River below Fort Miller, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	103.5	103.7	103.3	104.4	104.5	104.0	103.6	102.8	102.6	102.5	102.8	103.2
2	103.8	103.7	103.2	104.3	104.6	104.4	104.6	102.8	102.9	102.4	102.7	103.5
3	103.6	103.8	103.2	104.3	104.4	104.4	104.2	102.8	102.6	102.2	102.8	103.2
4	103.6	103.2	104.8	104.4	104.6	104.2	104.3	102.8	102.6	102.3	103.1	103.3
5	103.7	103.2	104.5	104.8	105.2	103.8	104.0	103.0	102.3	102.4	102.4	102.4
6	104.0	103.2	104.1	104.8	105.0	103.6	103.7	102.8	102.5	102.4	102.4	102.6
7	103.6	103.3	104.0	104.8	104.6	103.2	103.5	102.8	102.7	102.8	102.4	102.6
8	103.5	103.1	103.8	104.8	104.4	103.4	103.8	102.6	102.8	102.4	102.4	102.8
9	103.5	103.0	103.8	104.6	104.6	103.4	103.6	102.6	103.1	102.4	102.4	102.6
10	103.4	103.0	103.7	104.4	104.4	104.4	103.2	102.6	102.7	102.3	102.4	102.0
11	103.3	103.4	103.9	104.1	104.3	104.0	103.0	102.4	102.4	102.3	102.9	102.0
12	103.4	103.4	103.6	104.0	104.1	104.8	103.0	103.0	102.4	102.4	102.6	102.3
13	103.5	103.2	103.8	104.2	104.2	103.8	102.8	102.4	102.4	102.3	102.4	102.5
14	103.5	103.2	103.6	104.8	104.4	103.6	102.8	102.4	102.3	102.8	102.6	102.5
15	103.5	103.4	103.6	106.3	105.1	103.4	103.1	102.3	102.4	102.3	102.2	102.5
16	103.5	103.2	103.4	107.4	104.6	103.4	102.8	102.2	102.9	102.3	102.7	103.0
17	103.5	103.1	103.2	107 6	104.1	103.6	102.8	102.2	102.4	102.3	102.4	102 7
18	103.5	103.2	103.1	107.6	104.2	103.6	102.8	102.2	102.3	102.4	103 0	102.8
19	103.4	103.6	103.2	107.6	104.0	103.8	102.6	102.8	102.4	102.3	102.9	102.9
20	103.3	103.2	103.2	107.7	104.3	103.6	102.7	102.6	102.2	102.6	103.0	102.9
21	103.4	103.2	103.0	107.6	103.6	103.4	102.5	102.4	102.4	102.9	103.2	102.8
22	103.6	103.3	103.0	107.8	103.7	103.4	102.8	102.8	102.4	103.2	103.4	102.9
23	103.5	103.4	102.9	107.6	103.4	103.4	102.6	102.6	103.0	103.0	103.6	103.0
24	105.5	103.4	102.9	107.2	103.6	103.6	102.6	102.6	102.4	102.8	103.6	102.9
25	105.8	103.6	102.9	106.4	103.6	103.8	102.6	102.8	102.4	102.8	103.8	102.4
26	105.4	103.7	102.8	106.0	104.2	103.6	102.5	103.0	102.3	102.8	103.4	102.8
27	105.2	103.6	103.1	105.4	104 6	103.2	102.4	102.8	102.4	102.8	103.3	102.7
28	105.2	103.7	103.7	105.0	105.2	103.0	102.4	102 8	102.4	103.4	103.3	102.4
29	105.2	......	103.8	105.1	105.4	102.9	103.0	102.6	102.4	103.1	103.3	102.6
30	104.6	......	104.1	104.8	104.6	102.8	102.8	102.6	103.0	102.8	103.4	103.1
31	103.7	......	104.3	......	104.6	......	102.7	102.4	......	102.8	......	102.8

HUDSON RIVER BELOW DAM AT FORT MILLER, N. Y.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River below Dam at Fort Miller, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	108.6	105.2	104.9	105.1	104.7	105.7	105.3	104.9
2	......	......	......	......	108.4	105.1	105.3	105.0	104.7	106.0	105.2	104.9
3	......	......	......	......	108.1	105.1	104.8	105.0	104.7	105.7	105.1	104.9
4	......	......	......	......	108.0	105.0	104.7	105.0	104.7	105.4	105.0	104.9
5	......	......	......	......	107.6	104.9	104.9	105.0	104.7	105.1	105.0	104.9
6	......	......	......	......	107.1	105.1	105.0	105.2	104.9	105.1	105.0	104.9
7	......	......	......	......	106.9	105.8	105.0	105.2	104.7	105.0	105.0	104.9
8	......	......	......	......	106.4	105.3	105.0	105.2	104.7	105.0	105.0	104.9
9	......	......	......	......	106.2	106.0	105.0	105.0	104 6	104.8	105.0	104.9
10	......	......	......	......	106.2	106.6	104.7	104.9	104.5	104.6	105.0	104.9
11	......	......	......	......	106.0	106.5	104.9	104 9	104.6	105.1	105.0	105.1
12	......	......	......	......	105.9	106.5	104 9	104.9	104.6	105.5	104.9	105.1
13	......	......	......	......	105.6	106.1	105.0	104.9	104.5	105.5	104.9	104.9
14	......	......	......	......	105.6	105.8	105.0	104.7	104.4	105.4	105.0	104.9
15	......	......	......	......	105.5	105.4	105.0	105.0	104.9	105.2	104.9	104.9
16	......	......	......	......	105.5	105.3	105.0	104.8	104.6	105.3	104.9	104.9
17	......	......	......	......	105.8	105.2	104.7	104.8	104.6	105.1	104.9	105.0
18	......	......	......	......	106.0	105.1	105.0	104.8	104.5	104.9	105.0	104.9
19	......	......	......	......	105.8	105.0	105.0	104.8	104.9	104.9	105.0	104.9
20	......	......	......	......	106.1	105.1	104.9	105.0	104.7	105.0	104.8	105.0
21	......	......	......	......	105.9	105.0	105.0	104.8	104.6	105.1	105.0	104.9
22	......	......	......	......	106.1	105.0	104.9	105.8	104.7	107.1	105.0	104.9
23	......	......	......	......	106.1	105.0	105.0	105.9	104.7	108.1	104.9	105.0
24	......	......	......	......	105.7	105.0	104.8	105 9	104.6	107.8	104.9	105.0
25	......	......	......	......	105.7	105.0	104.9	105.3	104.7	107.0	104.9	105.0
26	......	......	......	......	105.8	104.1	105.0	105.1	105.0	106.5	104.9	105.2
27	......	......	......	......	105.8	105.0	105 0	104.9	105.2	106.3	104.9	105.3
28	......	......	......	......	105.8	105.0	105.0	105.0	105.2	105.9	105.0	105.3
29	......	......	......	......	105.6	104.9	105.0	104.7	105.0	105.6	105.0	105.3
30	......	......	......	......	105.5	104.9	105.0	104.7	105.2	105.6	105.0	105.1
31	......	......	......	......	105.4	......	104.8	104.7	......	105.5	......	105.2

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River below Dam at Fort Miller, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	105.2	104.8	104.7	113.2	106.1	104.8	106.3	105.7	104.7	105.2	105.0	105.2
2	105.2	104.8	104.6	113.0	106.2	104.7	106.5	105.7	104.8	105.1	105.0	105.2
3	105.3	104.8	104.7	109.9	106.0	104.6	107.0	105.5	105.4	105.1	105.2	105.5
4	105.1	104.8	104.7	109.5	106.1	104.8	107.4	105.3	106.1	105.0	105.3	105.8
5	105.0	104.8	104.8	108.3	105.8	104.7	107.2	105.1	106.1	105.0	105.3	105.6
6	104.9	104.8	105.0	107.6	105.9	104.7	106.9	105.2	107.5	104.9	105.3	105.6
7	104.8	104.8	104.9	108.2	105.6	104.6	106.5	105.0	107.3	104.9	105.3	105.6
8	105.3	104.8	104.9	108.3	105.6	105.2	106.2	105.0	107.0	105.0	105.4	105.5
9	105.2	104.8	104.9	107.7	105.7	105.4	105.9	105.0	106.6	104.9	105.4	105.5
10	104.9	104.8	105.0	106.9	105.7	105.5	105.7	104.9	106.4	104.9	105.3	105.6
11	104.9	104.8	104.9	106.5	105.4	105.7	105.3	105.0	106.0	104.9	105.3	105.5
12	104.9	104.8	105.0	106.9	105.4	105.5	105.2	105.0	105.8	104.9	105.3	105.3
13	104.9	104.6	105.0	107.0	105.4	105.5	105.1	105.0	105.8	105.2	105.1	105.0
14	105.0	104.7	105.0	106.8	105.4	105.5	105.2	105.0	105.7	105.4	105.0	105.0
15	105.0	104.6	105.0	107.0	105.6	105.4	105.0	105.0	105.5	105.3	105.0	104.9
16	105.1	104.6	105.0	106.8	105.5	105.3	105.0	105.0	105.4	105.3	105.0	105.0
17	104.9	104.6	105.0	106.5	105.4	105.1	105.0	105.3	105.5	105.1	105.1	105.0
18	104.9	104.5	105.0	106.2	105.2	105.5	104.9	105.4	105.7	105.0	105.0	105.0
19	104.8	104.4	105.0	105.9	105.3	106.1	105.0	105.3	106.4	105.0	105.0	105.0
20	104.8	104.5	105.1	105.7	105.2	106.3	105.0	105.3	106.8	105.0	104.9	105.0
21	104.8	104.4	105.3	105.9	105.4	106.4	105.0	105.1	106.9	105.2	104.9	104.9
22	105.0	104.6	105.5	107.0	105.3	106.9	104.8	105.0	106.7	105.3	104.9	105.0
23	104.9	104.5	105.4	106.9	105.2	107.5	105.0	105.0	106.3	105.3	104.9	105.1
24	104.9	104.5	105.4	106.8	105.2	107.5	104.9	104.9	106.3	105.2	104.8	105.2
25	104.8	104.5	105.9	106.6	105.1	107.6	104.9	105.0	105.9	105.1	104.9	105.0
26	104.9	104.5	106.5	106.2	105.1	106.9	104.8	105.0	105.6	105.1	104.8	105.1
27	104.9	104.5	107.5	105.9	105.1	106.5	104.9	104.9	105.4	105.0	105.0	105.0
28	104.9	104.6	107.8	105.9	105.1	106.4	104.9	104.9	105.3	105.0	104.9	105.0
29	104.9	......	108.3	106.0	105.1	106.4	104.8	104.9	105.1	105.0	104.9	104.9
30	104.8	......	109.5	106.1	104.8	106.4	105.0	104.6	105.1	105.1	105.0	104.9
31	104.8	......	111.4	......	104.7	......	105.4	104.7	......	105.1	......	105.0

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River below Dam at Fort Miller, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	105.08	105.48	105.23	105.48	105.88	105.73	105.23	104.98	104.93	104.93	104.93	105.08
2	105.23	105.43	105.13	105.68	105.88	105.83	105.78	104.98	104.93	104.98	104.93	105.18
3	105.23	105.38	104.93	105.63	106.08	105.33	105.63	104.98	104.98	104.93	104.93	105.08
4	105.80	105.48	106.08	105.63	106.08	105.23	105.43	104.93	104.93	104.93	104.93	105.08
5	105.13	105.43	105.83	105.88	106.18	105.13	105.43	104.88	104.93	104.93	104.93	104.98
6	105.23	105.38	105.63	105.88	105.88	105.08	105.33	104.93	104.93	104.93	104.93	104.93
7	105.03	105.43	105.48	105.78	106.08	105.18	105.38	104.98	104.93	104.98	104.93	104.98
8	105.03	105.33	105.38	105.53	105.88	105.18	105.28	104.93	104.93	104.93	104.93	104.98
9	104.98	105.28	105.33	105.73	105.78	105.23	105.13	104.93	104.93	104.98	104.93	104.98
10	104.98	105.28	105.28	105.68	105.88	105.33	105.03	104.93	104.93	104.93	104.93	104.98
11	104.98	105.38	105.28	105.58	105.78	105.63	105.08	104.93	104.93	104.93	104.93	104.98
12	104.98	105.28	105.28	105.48	105.63	105.73	105.08	104.83	104.93	104.93	104.93	104.98
13	104.93	105.13	105.23	105.53	105.48	105.53	105.03	104.88	104.93	104.98	104.93	104.93
14	105.03	104.98	105.18	105.83	105.68	105.43	104.93	104.93	104.93	104.93	104.93	104.98
15	105.08	105.08	105.13	106.28	106.08	105.23	105.13	104.93	104.98	104.93	104.93	104.98
16	105.08	105.08	105.08	107.83	105.88	105.08	104.98	104.93	104.93	104.93	104.98	104.98
17	105.08	104.98	104.98	108.08	105.58	104.93	104.93	104.93	104.93	104.98	104.98	104.98
18	104.98	105.13	105.18	108.13	105.68	105.23	104.93	104.93	104.93	104.93	104.93	105.03
19	104.98	105.23	104.98	108.08	105.63	105.38	104.98	104.93	104.93	104.93	104.98	105.03
20	104.98	105.03	105.08	108.18	105.48	105.33	104.93	104.93	104.93	104.98	104.98	105.08
21	105.03	104.98	105.08	108.13	105.43	105.18	104.93	104.93	104.93	104.93	105.03	105.03
22	105.03	105.03	104.98	108.13	105.43	105.08	104.88	104.93	104.93	104.98	105.18	105.03
23	105.38	105.08	104.98	108.03	105.28	105.08	104.83	104.93	104.93	104.93	105.23	105.08
24	106.33	105.13	104.98	107.63	105.28	104.98	104.93	104.93	104.93	104.93	105.28	105.03
25	106.53	105.28	105.03	107.23	105.33	105.23	104.98	104.98	104.93	104.93	105.28	104.98
26	106.48	105.33	104.93	106.93	105.63	105.13	104.93	104.93	104.93	104.93	105.18	105.08
27	106.28	105.28	105.08	106.78	105.78	105.08	104.93	104.93	104.93	104.93	105.13	104.98
28	106.13	105.33	105.48	106.28	105.98	105.03	104.93	104.93	104.93	104.93	105.08	104.98
29	105.88	......	105.48	106.03	105.43	104.93	104.93	104.93	104.98	104.98	105.08	104.98
30	105.78	......	105.48	105.98	105.98	104.93	104.98	104.98	104.98	104.98	105.08	104.98
31	105.48	......	105.58	......	105.83	......	104.98	104.98	104.98	104.98	......	104.98

HUDSON RIVER ABOVE DAM AT FORT MILLER, N. Y.

***Mean Daily Elevation** of Water-surface (Barge Canal Datum) of **Hudson River** above Dam at Fort Miller, N. Y.*

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	119.0	116.2	115.4	115.7	116.0	116.9	116.3	115.6
2	......	......	......	......	118.7	116.1	116 1	115.5	116.0	117.0	116.1	115.6
3	......	......	......	......	118 6	116.0	115.9	115.7	116.0	116.9	116.1	115.5
4	......	......	......	......	118.5	116.0	115.9	115.5	115.9	116.8	116.0	115.5
5	......	......	......	......	118 4	115.9	115 8	115 5	115.9	116.6	116.0	115.4
6	......	......	......	......	118.0	116.0	115.7	115.5	116.3	116.5	116.1	115.4
7	......	......	......	......	117.9	116.7	115.9	116.3	116.1	116.3	115.9	115.3
8	......	......	......	......	117.7	116.3	115.8	116.1	116.0	115.9	115.9	115.5
9	......	......	......	......	117.5	116.3	115.7	115.6	116 0	114.2	115.9	115.5
10	......	......	......	......	117.4	117.3	115.6	115.5	116.0	115.9	115.8	115.4
11	......	......	......	119.6	117.1	117 3	115.6	115.6	115.9	116.0	115.7	115.7
12	......	......	......	119.5	117.0	117.3	115.5	115.7	116.0	116.5	115.8	115.7
13	......	......	......	119.1	116.7	116.9	115 5	115.5	116.0	116.4	116.0	115.5
14	......	......	......	118.7	116.6	116.7	115.7	115.6	116.0	116.3	115.9	115.5
15	......	......	......	118.1	116.6	116.4	115.7	115.5	116.3	116.3	115.7	115.6
16	......	......	......	117.7	116.5	116.3	115.7	115.5	116.0	116.4	115.7	115.6
17	......	......	......	117.7	116.9	116.1	115.8	115.3	116.1	116.1	115.7	115.5
18	......	......	......	117.5	117.0	116.1	115 7	114.9	115.9	155.9	115.7	115.4
19	......	......	......	117.4	116.8	116.0	115.5	115.2	116.5	115 9	115.6	115.1
20	......	......	......	117.3	117.1	115.9	115.3	115 4	116.0	115.7	115.9	115.5
21	......	......	......	117 3	117.0	115.7	115.4	115.7	115.9	115.9	115.7	115.5
22	......	......	......	117.0	117.1	115.7	115.4	116.7	115.9	117.9	115.7	115.4
23	......	......	......	116.9	117.1	115.7	115.1	116 7	116 0	118.5	115.5	115.3
24	......	......	......	117.3	116.9	115.7	115.7	116.7	115.9	118.1	115.5	115.4
25	......	......	......	117.3	116.7	115.7	114.7	116.7	116.1	117.8	115.5	115.7
26	......	......	......	117.7	116.7	115.7	114.6	116.5	116.3	117.4	115.7	115.7
27	......	......	......	117.9	116.7	115.7	115.1	116.1	116.6	117.1	115.8	115.9
28	......	......	......	118.1	116.9	115.7	114.9	116.1	116.5	117.0	115.7	115.9
29	......	......	......	118.5	116.7	115.3	115 5	116.1	116.3	116.7	115.9	116.0
30	......	......	......	118.9	116.5	115.3	115.3	116.0	116.7	116.7	115.7	115.7
31	......	......	......	......	116.3	......	116.0	116.0	......	116.5	......	115.8

***Mean Daily Elevation** of Water-surface (Barge Canal Datum) of **Hudson River** above Dam at Fort Miller, N. Y.*

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	116.0	115.4	115.6	122.1	117.4	115.8	117.0	116.6	115.3	116.2	116.0	116.4
2	116.0	115.6	115.8	121.8	117.5	115.7	117.3	116.6	115.6	116.0	116.0	116.3
3	115.9	115.6	115.6	120.2	117.2	115.6	117.6	116 4	116.2	116.0	116.3	116.6
4	115.8	115 6	115.6	119.8	117.2	116 0	117.9	116.2	117.0	115.8	116.2	117.0
5	115.8	115 8	115.8	118.8	117.0	116.0	117 8	116 0	117.9	115.9	116.3	116.6
6	115.8	115.8	115.6	118.8	117.0	115 8	117.5	116.0	118.0	115.8	116.4	116.8
7	115.9	115.7	115.6	119.4	116.8	116.1	117.2	115.8	117.9	115.8	116.6	116.7
8	116.1	115.7	115.6	118.8	116.8	116.4	117.0	115.8	117.6	116.0	116.6	116.6
9	116.0	115.7	115.6	118.3	116.9	116.4	116.8	116.0	117.4	115.9	116.8	116.5
10	115.8	115.8	115.6	117.8	116.8	116.4	116.6	115.8	117.4	115.8	117.0	116.6
11	115.8	115.6	115.4	117.8	116.6	116.5	116.5	115.6	117.0	115.8	116.8	116.5
12	115.9	115.4	115.6	118.0	116.4	116.6	116.4	115.7	116.6	115.8	116.6	116.4
13	115.8	114.8	115.4	118.2	116.4	116.5	116.4	115.9	116.8	116.2	116.4	116.1
14	115.8	115.2	115.4	118.2	116.8	116.4	116.2	116.0	116.6	116.5	116.4	116.0
15	116.0	115.4	115.4	118.0	116.6	116.6	115.9	115 6	116.4	116.4	116.4	116.4
16	115.8	115.4	115.4	118.0	116.8	116.6	166.2	115.6	116.3	116.2	116.2	116.0
17	115.8	115.5	115.6	117.8	116.6	116.4	116.0	116.1	116.4	116.1	116.1	116.0
18	115.8	115.4	115.6	117.6	116.7	116.2	116.1	116.4	116.5	116.0	116.0	115.8
19	115.8	115.1	115.8	117.4	116.5	116.8	116.0	116.4	117.2	116.0	116.3	115.8
20	115.8	114.8	116.0	117.3	116.6	117.0	116.0	116.1	117.4	116.0	116.0	115.8
21	115.8	115.6	116.2	117.8	116.6	117.2	116.0	115.8	117.6	116.3	115.8	115.8
22	115.8	115.6	116.2	117.8	116.6	117.6	115.8	115.6	117.6	116.6	115.8	115.9
23	115.8	115.6	116.0	118.0	116.6	117.9	116.0	115.6	117.2	116.4	115.8	116.2
24	115.8	115.6	116.0	117.8	116.6	118.2	115.8	115.6	117.1	116.3	115.7	116.4
25	115.7	115.6	116.4	117.6	116.4	117.6	115.7	115.6	116.8	116.2	115.8	116.3
26	115.7	115.7	116.9	117.4	116.4	117.4	115.6	115.6	116.6	116.0	116.0	116.2
27	115.6	115.4	117.0	117.1	116.4	117.5	115.6	115.4	116.4	116.0	115.9	116.0
28	115.7	115.7	117.0	117.0	116.2	117.2	115.6	115.2	116.2	115.9	115.8	115.9
29	115.8	......	117.0	117.0	116.1	117.2	115.6	115.2	116.1	116.2	115.8	115.9
30	115.4	......	118.9	117.4	115.6	117.3	115.8	115.0	116.0	116.1	116.1	116.0
31	115.2	......	120.3	......	115.7	......	115.9	115.7	......	116.0	......	116.2

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River above Dam at Fort Miller, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	116.0	116.6	116.2	117.2	117.0	117.0	116.2	115.6	115.6	115.4	116.0	116.2
2	116.0	116.3	116.0	116.8	117.0	116.7	117.0	115.6	115.6	115.6	116.0	116.6
3	116.0	116.5	115.8	116.8	117.3	116.6	116.9	115.6	115.6	115.4	115.9	116.2
4	116.0	116.4	116.8	116.9	117.2	116.4	116.8	115.6	115.8	115.4	116.0	116.2
5	116.2	116.2	116.8	117.2	117.3	116.4	116.4	115.6	115.8	115.4	115.2	115.4
6	116.4	116.2	116.7	117.2	117.4	116.2	116.4	115.4	115.6	115.3	115.2	115.4
7	116.4	116.0	116.6	117.1	117.0	116.1	116.4	115.6	115.6	115.7	115.4	115.6
8	116.1	115.8	116.5	117.4	117.0	116.1	116.4	115.4	115.8	115.1	115.3	115.8
9	116.2	115.8	116.4	117.0	116.9	116.2	116.1	115.4	115.8	115.3	115.0	116.1
10	116.0	115.8	116.4	116.8	116.8	116.8	116.0	115.2	115.5	115.4	115.2	115.2
11	115.8	116.1	116.6	116.7	116.9	116.8	116.0	115.2	115.5	115.4	155.5	115.6
12	115.8	116.0	116.2	116.7	116.8	117.0	116.0	115.6	115.4	115.4	115.4	115.6
13	116.0	115.8	116.2	116.8	117.1	116.6	115.8	115.0	115.2	115.3	115.4	115.4
14	116.2	116.1	116.2	117.2	117.0	116.4	115.8	115.4	115.2	115.6	115.6	115.4
15	116.0	116.3	116.2	118.1	117.4	116.2	116.0	115.6	115.1	114.8	115.4	115.5
16	116.0	116.0	116.2	118.8	117.2	116.4	115.8	115.2	115.2	115.0	115.6	115.7
17	116.0	115.8	116.1	118.9	116.8	116.4	115.7	114.7	115.8	115.1	115.5	115.7
18	115.9	116.1	116.0	119.0	116.8	116.2	115.7	114.6	115.2	115.2	116.0	115.9
19	115.9	116.0	115.8	119.0	116.8	116.4	115.4	115.6	115.0	115.1	116.0	116.0
20	115.8	115.8	115.8	118.9	117.0	116.3	115.6	115.2	115.4	115.4	116.3	115.9
21	116.0	115.8	116.0	118.8	116.4	116.1	114.8	115.2	115.2	116.0	116.4	115.9
22	116.2	116.1	115.9	118.9	116.4	116.0	115.6	115.4	115.4	116.0	116.4	115.8
23	116.5	116.0	115.8	118.8	116.2	116.0	115.2	115.5	115.4	116.0	116.6	116.1
24	117.6	116.1	115.6	118.4	116.2	116.3	115.6	115.5	115.8	116.0	116.6	115.7
25	118.0	116.3	116.0	118.1	116.4	116.2	115.3	115.8	115.4	116.0	116.8	116.2
26	117.8	116.4	115.6	117.8	116.8	116.0	115.4	115.8	115.4	115.8	116.4	115.9
27	117.7	116.4	115.8	117.6	117.2	116.0	115.2	116.0	115.3	115.6	116.2	115.6
28	117.6	116.4	116.4	117.3	117.6	115.8	115.2	116.0	115.4	116.2	116.2	115.5
29	117.3	......	116.6	117.3	117.6	115.8	115.6	115.9	115.4	116.0	116.4	115.7
30	117.0	......	116.7	117.2	117.2	115.8	115.4	115.8	115.4	115.9	116.4	116.1
31	116.6	......	116.8	......	117.2	......	115.6	115.7	115.8	116.0	......	115.7

Current Meter Discharge Measurements of Flume, Fort Miller Paper Co., at Fort Miller N. Y.

DATE.	Hydrographer.	Gage height.	Width.	Area of section.	Mean velocity.	Discharge.
		Feet.	*Feet.*	*Square feet.*	*Ft. per second.*	*Second-feet.*
1906. Nov. 26	R. E. Horton.....	2.36	20.2	189.2	2.08	36

HUDSON RIVER ABOVE CROCKERS REEF.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River above Crockers Reef.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	122.5	117.1	115.9	116.3	116.3	118.1	117.2	116.0
2	......	......	......	......	122.3	117.1	116.8	116.1	116.3	118.2	117.1	116.1
3	......	......	......	......	122.1	116.7	117.3	115.9	116.3	118.1	116.9	116.2
4	......	......	......	......	122.0	116.5	117.4	115.9	116.3	117.5	116.9	116.3
5	......	......	......	......	121.4	116.1	117.1	116.1	115.9	117.4	116.7	115.9
6	......	......	......	......	120.9	116.1	117.4	116.2	116.1	117.1	116.7	116.0
7	......	......	......	......	120.6	117.4	117.3	116.7	116.5	116.9	116.5	115.9
8	......	......	......	......	119.6	117.3	117.5	116.7	116.5	116.5	116.5	116.2
9	......	......	......	......	119.7	119.0	117.5	116.5	116.5	116.6	116.3	116.1
10	......	......	......	......	119.5	119.1	115.9	116.7	116.3	116.6	116.3	116.2
11	......	......	......	123.7	119.1	119.0	116.2	116.1	116.3	116.9	116.4	116.4
12	......	......	......	123.2	118.7	119.0	116.7	116.1	116.5	117.3	116.6	116.3
13	......	......	......	122.7	118.1	118.6	116.7	116.1	116.4	117.4	116.5	116.2
14	......	......	......	121.8	117.9	117.9	116.1	116.0	116.5	117.2	116.4	116.1
15	......	......	......	120.9	117.5	117.6	116.3	116.0	116.7	117.0	116.3	116.2
16	......	......	......	120.2	117.8	117.3	116.3	115.9	116.5	116.7	116.3	116.2
17	......	......	......	119.7	118.5	117.1	116.1	115.8	116.4	116.6	116.2	116.2
18	......	......	......	119.5	118.6	116.9	116.1	115.4	116.1	116.5	116.3	116.0
19	......	......	......	119.3	118.3	117.1	116.7	115.7	116.7	116.5	116.1	115.6
20	......	......	......	119.1	118.9	117.1	116.3	115.8	116.4	116.6	116.3	116.3
21	......	......	......	118.7	118.7	117.5	115.9	115.9	116.4	117.1	116.3	116.2
22	......	......	......	118.6	118.7	117.2	115.7	116.0	116.4	120.4	116.2	116.0
23	......	......	......	118.5	118.9	117.4	115.5	118.0	116.4	121.3	116.1	115.9
24	......	......	......	118.6	118.3	117.4	115.2	117.9	116.5	120.9	115.8	116.1
25	......	......	......	119.0	118.0	117.5	115.6	117.3	116.5	120.0	115.4	116.2
26	......	......	......	119.9	118.1	115.7	115.6	117.1	117.0	119.1	116.4	116.2
27	......	......	......	120.3	118.0	117.7	115.4	116.7	117.3	118.0	116.5	116.4
28	......	......	......	120.7	118.3	116.1	115.4	116.4	117.3	118.1	116.0	117.0
29	......	......	......	121.8	117.3	115.7	116.1	116.3	117.2	117.8	116.5	117.1
30	......	......	......	122.3	117.7	115.5	115.9	116.4	117.5	117.6	116.4	116.9
31	......	......	......	......	117.3	......	116.1	116.4	......	117.4	......	116.9

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River above Crockers Reef.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	117.0	116.5	116.5	124.9	118.9	116.5	118.2	117.8	115.8	117.0	116.6	117.0
2	117.1	116.4	116.6	123.0	118.6	116.7	118.2	118.0	116.2	116.9	116.7	116.9
3	116.9	116.4	116.5	122.1	118.5	116.6	119.5	117.5	116.7	116.7	117.3	117.6
4	116.9	116.4	116.4	121.6	118.8	116.4	120.0	117.6	118.4	116.6	117.4	118.2
5	116.8	116.5	116.3	121.5	118.8	116.5	119.9	117.1	120.0	116.7	117.3	117.8
6	116.7	116.4	116.3	122.1	118.3	116.4	119.3	116.7	120.5	116.4	117.4	117.8
7	116.9	116.5	116.6	122.3	118.0	116.5	119.1	117.0	120.2	116.3	117.5	117.7
8	117.2	116.6	116.6	121.6	118.0	116.7	119.5	116.5	119.7	116.2	117.8	117.5
9	117.0	116.5	116.5	120.8	118.2	118.0	118.0	116.7	119.2	116.7	117.8	117.3
10	116.8	116.7	116.5	120.1	118.0	119.4	118.3	116.5	118.6	116.4	117.7	117.2
11	116.8	116.5	116.5	119.8	117.9	118.5	117.6	116.4	118.2	116.4	117.5	117.0
12	116.9	116.4	116.3	120.5	117.7	118.2	117.1	116.2	118.0	116.5	117.2	116.7
13	116.9	116.3	116.1	120.6	117.5	117.9	116.9	116.3	118.0	116.4	117.1	116.7
14	116.8	116.6	116.3	120.6	117.5	117.6	117.0	116.3	117.9	117.3	117.1	116.7
15	116.7	116.7	116.4	120.5	117.6	117.5	116.8	116.4	117.0	117.2	117.1	116.7
16	116.6	116.7	116.3	120.4	117.1	117.4	116.7	116.7	117.1	117.0	116.9	116.8
17	116.6	116.5	116.5	119.7	117.8	117.0	116.7	117.2	117.1	116.9	116.8	116.0
18	116.6	116.6	116.4	119.3	117.5	118.3	116.6	117.1	117.4	116.9	116.7	115.9
19	116.6	116.2	116.2	118.6	117.2	118.7	116.7	116.9	117.9	116.7	116.5	116.3
20	116.7	115.8	116.9	118.2	117.2	118.7	116.8	116.8	118.8	116.8	116.7	116.1
21	116.6	116.7	117.4	118.3	117.2	119.7	116.8	116.6	119.2	117.2	116.5	116.4
22	116.7	116.6	117.6	119.2	117.6	119.7	116.7	116.3	119.6	117.5	116.3	116.4
23	116.6	116.5	117.8	120.1	117.6	119.8	116.4	116.1	119.0	117.3	116.1	116.7
24	116.6	116.5	117.7	120.2	116.9	119.5	116.5	116.3	118.4	117.0	116.1	117.0
25	116.8	116.6	118.0	119.3	116.6	119.2	116.0	116.1	118.0	116.9	116.4	116.7
26	116.7	116.4	118.7	119.4	116.4	119.0	116.4	116.3	117.6	116.7	116.5	116.6
27	116.6	116.3	119.6	118.9	115.7	119.2	116.3	116.4	117.2	116.8	116.2	116.3
28	116.5	116.6	120.0	118.7	116.6	119.1	116.1	116.2	117.1	116.7	116.3	116.2
29	116.3	......	120.5	118.7	116.8	119.4	116.2	115.8	116.9	116.6	116.4	116.4
30	116.4	......	121.9	118.6	116.9	119.6	116.3	115.8	117.0	116.9	116.7	116.7
31	116.3	......	123.8	......	116.7	......	116.0	115.9	......	116.7	......	117.1

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River above Crockers Reef.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	117.06	117.41	116.96	116.86	118.41	118.46	117.26	116.96	119.11	120.46	120.66	120.96
2	116.96	117.21	116.76	116.86	118.41	118.06	118.81	116.56	119.21	120.36	120.56	120.91
3	116.81	117.46	116.86	116.91	118.71	117.71	118.46	117.21	119.46	120.36	120.56	120.96
4	116.61	116.76	118.66	118.11	118.86	117.36	118.16	117.21	120.01	120.46	120.51	120.86
5	116.71	116.81	118.31	118.46	118.81	116.96	118.06	117.01	120.01	120.46	120.46	120.36
6	117.06	117.06	117.86	118.61	118.71	116.56	117.91	117.06	120.06	120.76	120.26	120.26
7	117.06	117.06	117.61	118.41	118.41	116.71	117.61	117.21	120.36	120.76	120.36	120.36
8	117.01	116.61	117.46	118.26	118.10	116.86	117.31	117.06	120.86	120.31	120.21	120.56
9	117.01	116.81	117.41	118.06	118.41	117.16	117.01	116.86	120.46	120.06	120.16	120.41
10	116.86	116.86	117.41	117.91	118.36	117.81	116.86	116.71	120.36	120.21	120.06	120.56
11	116.81	116.61	117.06	117.86	118.26	118.26	116.96	116.86	120.46	120.16	120.31	120.31
12	116.61	116.76	116.91	117.76	118.06	118.66	116.96	116.96	120.41	120.21	120.06	120.26
13	116.91	116.96	116.81	117.91	117.81	117.31	116.81	116.31	120.31	120.16	120.26	120.36
14	116.56	116.91	116.61	118.61	118.21	116.96	116.71	116.46	120.31	119.86	120.66	120.41
15	116.61	117.16	116.86	120.21	118.91	116.91	116.61	116.66	[illegible]	119.91	120.56	120.46
16	116.56	116.71	116.71	121.41	118.51	116.76	116.46	116.26	120.06	120.06	120.46	120.06
17	116.56	116.61	116.46	121.91	117.81	117.41	116.36	116.26	120.31	120.06	120.46	120.66
18	116.46	116.46	116.16	121.96	117.86	117.36	116.56	116.26	120.31	119.91	120.46	120.76
19	116.51	116.51	116.21	121.96	117.71	117.21	116.11	116.31	120.46	119.46	120.56	120.76
20	116.51	116.71	116.51	122.01	117.81	117.01	115.86	116.71	120.36	119.66	120.51	120.71
21	116.41	116.61	116.66	122.01	117.26	116.91	115.46	116.96	120.36	120.21	121.11	120.61
22	116.81	116.76	116.01	121.91	117.16	116.71	115.56	117.26	120.46	120.96	121.16	120.71
23	117.51	116.86	116.11	121.91	116.86	116.66	115.66	117.16	120.06	120.86	121.36	120.31
24	119.31	116.81	116.21	121.31	116.86	116.96	116.11	117.56	120.56	120.51	121.46	120.66
25	119.86	116.96	116.06	120.61	117.11	117.11	116.21	117.56	120.41	120.56	121.26	120.56
26	119.76	117.06	116.01	119.96	117.91	116.96	116.01	117.41	120.36	120.56	121.16	120.66
27	119.31	117.31	116.61	119.31	118.66	116.86	115.76	117.91	120.36	120.51	121.11	120.26
28	118.96	117.41	117.46	118.81	119.11	116.76	115.96	117.46	120.36	120.46	121.06	120.46
29	118.71	......	117.56	118.76	119.36	116.71	116.16	117.66	120.46	120.51	121.16	120.46
30	118.21	......	117.71	118.51	118.76	116.71	116.86	117.41	120.46	120.56	121.26	120.51
31	117.66	......	117.96	......	118.81	......	117.26	117.96	......	120.61	......	120.66

HUDSON RIVER AT MOUTH OF MOSES KILL, 2½ MILES ABOVE FORT MILLER, N. Y.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River at Moses Kill.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	......	......	......	......	......	......	......	......	......	......	......	121.0
2	......	......	......	......	......	......	......	......	......	......	......	120.7
3	......	......	......	......	......	......	......	......	......	......	......	120.8
4	......	......	......	......	......	......	......	......	......	......	......	121.0
5	......	......	......	......	......	......	......	......	......	......	......	120.0
6	......	......	......	......	......	......	......	......	......	......	......	120.1
7	......	......	......	......	......	......	......	......	......	......	......	120.4
8	......	......	......	......	......	......	......	......	......	......	......	120.5
9	......	......	......	......	......	......	......	......	......	......	......	120.0
10	......	......	......	......	......	......	......	......	......	......	......	120.4
11	......	......	......	......	......	......	......	......	......	......	......	120.1
12	......	......	......	......	......	......	......	......	......	......	......	120.2
13	......	......	......	......	......	......	......	......	......	......	......	120.1
14	......	......	......	......	......	......	......	......	......	......	......	120.1
15	......	......	......	......	......	......	......	......	......	......	......	120.2
16	......	......	......	......	......	......	......	......	......	......	......	119.9
17	......	......	......	......	......	......	......	......	......	......	......	120.5
18	......	......	......	......	......	......	......	......	......	......	......	120.4
19	......	......	......	......	......	......	......	......	......	......	......	120.4
20	......	......	......	......	......	......	......	......	......	......	......	120.6
21	......	......	......	......	......	......	......	......	......	......	......	120.4
22	......	......	......	......	......	......	......	......	......	......	......	120.4
23	......	......	......	......	......	......	......	......	......	......	......	120.2
24	......	......	......	......	......	......	......	......	......	......	......	120.6
25	......	......	......	......	......	......	......	......	......	......	......	120.2
26	......	......	......	......	......	......	......	......	......	......	......	120.6
27	......	......	......	......	......	......	......	......	......	......	......	120.2
28	......	......	......	......	......	......	......	......	......	......	......	120.2
29	......	......	......	......	......	......	......	......	......	......	......	120.3
30	......	......	......	......	......	......	......	......	......	......	......	119.9
31	......	......	......	......	......	......	......	......	......	......	......	120.5

HUDSON RIVER OPPOSITE MOUTH OF SNOOK KILL, 2½ MILES BELOW FORT EDWARD, N. Y.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River opposite Snook Kill.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	124.2	117.6	116.1	116.8	116.7	118.9	117.7	116.0
2	......	......	......	......	124.0	117.4	117.4	116.2	116.6	119.0	117.5	116.2
3	......	......	......	......	123.7	117.2	116.7	116.4	116.6	118.7	117.3	116.5
4	......	......	......	......	123.5	117.0	116.5	116.2	115.9	118.1	117.2	116.2
5	......	......	......	......	123.1	116.6	116.7	116.3	116.6	118.0	117.1	116.3
6	......	......	......	......	122.1	117.2	116.7	116.8	117.1	117.5	117.0	116.0
7	......	......	......	......	121.8	118.7	116.8	117.4	116.6	117.3	116.9	116.1
8	......	......	......	......	120.7	117.1	116.6	117.4	116.6	116.8	116.7	116.4
9	......	......	......	......	120.7	119.0	116.5	116.3	116.7	116.7	116.8	116.2
10	......	......	......	......	120.6	120.1	116.0	116.3	116.6	117.1	116.5	116.3
11	......	......	......	125.7	119.8	119.1	116.4	116.4	116.3	117.1	116.6	116.3
12	......	......	......	125.1	119.4	119.7	116.3	116.4	116.8	117.9	117.9	116.5
13	......	......	......	124.4	118.7	119.3	116.3	116.4	116.5	118.0	116.6	116.3
14	......	......	......	123.3	118.5	118.7	116.5	116.1	116.7	117.8	116.9	116.3
15	......	......	......	122.3	118.1	118.1	116.6	116.3	116.6	117.7	116.4	116.2
16	......	......	......	121.5	118.4	117.7	116.7	116.2	116.5	117.5	116.4	116.2
17	......	......	......	120.8	119.2	117.5	116.4	115.9	116.6	117.3	116.3	116.3
18	......	......	......	120.6	119.4	117.3	116.6	115.6	116.1	117.0	116.4	116.0
19	......	......	......	120.3	119.0	116.9	116.4	115.9	117.0	116.9	116.4	115.8
20	......	......	......	120.1	119.7	117.0	116.0	115.9	116.7	116.7	116.3	116.4
21	......	......	......	119.7	119.5	116.6	116.2	116.2	116.7	117.1	116.5	116.2
22	......	......	......	119.3	119.5	116.6	116.0	118.6	116.6	121.6	116.2	116.2
23	......	......	......	119.1	119.7	116.6	115.8	118.8	116.7	122.8	116.2	116.0
24	......	......	......	119.3	118.9	116.6	116.2	118.7	116.6	122.3	116.2	116.3
25	......	......	......	120.0	118.6	116.5	115.6	118.0	116.5	121.2	115.8	116.1
26	......	......	......	121.0	118.6	116.1	115.8	117.6	117.2	120.4	116.4	116.4
27	......	......	......	121.5	118.7	116.5	115.7	117.0	117.8	119.8	116.3	116.7
28	......	......	......	122.1	118.8	116.4	115.7	116.7	117.8	119.2	116.5	117.2
29	......	......	......	123.4	118.0	115.9	116.5	116.7	117.6	118.8	116.5	117.5
30	......	......	......	124.0	118.3	115.8	116.0	116.6	117.9	118.4	116.6	117.2
31	......	......	......	......	117.8	......	116.6	116.4	......	118.2	......	117.2

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River opposite Snook Kill.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	117.2	116.6	116.4	126.8	119.7	116.6	119.0	118.8	115.7	117.3	117.0	117.6
2	117.7	116.7	116.5	126.2	119.9	116.7	118.9	118.7	116.4	117.3	117.3	117.6
3	117.5	116.5	116.4	124.7	119.1	116.6	120.8	118.2	117.0	117.1	117.9	118.3
4	117.2	116.6	116.6	123.4	119.4	116.4	121.4	117.7	119.3	117.0	117.6	119.3
5	117.1	116.6	116.2	123.0	119.2	116.5	121.3	117.4	121.6	117.0	117.7	118.8
6	116.8	116.5	116.4	123.7	119.1	116.3	120.8	117.1	122.0	116.7	117.9	118.7
7	117.2	116.6	116.4	124.0	118.6	116.3	120.0	117.1	121.6	116.6	118.5	118.6
8	117.3	116.6	116.4	123.1	118.6	117.1	119.3	116.9	120.9	116.5	118.5	118.4
9	117.5	116.7	116.6	122.0	118.6	118.2	118.9	117.2	120.2	117.0	118.5	118.2
10	117.2	116.7	116.4	121.3	118.6	120.4	118.5	117.0	119.5	116.6	118.4	......
11	117.2	116.5	116.3	121.0	118.6	118.8	118.0	116.8	119.0	116.4	118.0	......
12	117.2	116.1	115.8	121.7	118.1	118.6	117.8	116.6	119.0	116.5	117.6	......
13	117.1	116.4	116.3	121.8	118.3	118.0	117.5	116.5	119.0	117.5	117.5	......
14	117.1	116.8	116.4	121.7	118.0	118.4	117.4	116.8	118.6	118.2	117.5	......
15	116.9	116.8	116.3	121.5	117.8	118.2	117.1	116.6	118.1	117.8	117.6	......
16	117.1	116.8	116.3	121.6	118.2	117.8	117.0	116.7	117.6	117.7	117.4	......
17	116.8	116.6	116.4	120.8	118.1	117.4	117.3	117.5	117.5	117.4	117.3	......
18	116.8	116.8	116.4	120.1	117.9	118.4	116.9	117.8	118.4	117.2	117.2	......
19	116.8	116.1	115.8	119.5	117.7	119.7	117.2	117.5	119.8	117.1	117.0	......
20	116.8	116.0	116.9	118.9	117.5	119.7	117.1	117.2	120.5	117.3	117.1	......
21	116.7	116.8	117.8	118.8	117.4	120.8	117.2	116.9	120.9	117.7	116.6	......
22	116.6	116.5	118.1	120.6	118.0	121.6	116.9	117.0	120.7	117.9	116.5	......
23	117.1	116.5	118.0	121.2	117.2	121.2	116.6	116.5	120.0	117.8	116.5	......
24	116.8	116.5	118.1	121.3	117.2	120.5	116.7	116.5	119.3	117.6	116.2	......
25	116.7	116.5	118.5	121.0	117.0	119.7	116.3	116.4	118.9	117.4	116.7	......
26	116.7	116.2	119.0	120.2	116.8	119.5	116.4	116.4	118.3	117.3	116.3	......
27	116.7	116.4	120.5	119.9	117.0	120.1	116.5	116.2	117.9	117.1	116.9	......
28	116.6	116.5	121.3	119.5	117.3	120.5	116.4	115.9	117.7	116.9	116.6	......
29	116.1	......	122.1	119.1	117.3	120.2	116.4	115.8	117.5	117.0	116.7	......
30	116.5	......	124.4	119.2	117.0	119.6	116.5	115.6	117.3	117.4	117.3	......
31	116.2	......	127.1	......	116.7	......	117.5	116.0	......	117.1	......	......

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River opposite Snook Kill.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1				118.8	119.4							121.3
2				118.8	119.5							120.9
3				118.8	120.1							121.2
4				119.0	120.9							121.3
5				119.5	120.3							120.3
6				119.5	119.9							120.4
7				119.3	119.6							120.6
8				119.1	119.4							120.8
9				119.0	119.4							120.2
10				118.8	119.4							120.3
11				118.5	119.2							120.4
12				118.5	118.9							120.3
13				118.6	118.7							120.4
14				119.5	119.4							120.3
15				121.6	120.4							120.4
16				122.2	119.5							120.2
17				124.0	118.8							120.7
18				124.0	119.0							120.7
19				123.8	118.8							120.3
20				124.1								120.8
21			116.9	124.1								120.7
22			115.5	124.0								120.7
23			116.8	123.8								120.4
24			116.5	123.4								120.9
25			116.2	122.3								120.4
26			115.2	121.7								120.8
27			116.7	120.8								120.4
28			117.8	120.3								120.5
29			118.5	119.8								120.5
30			118.4	119.6								120.2
31			118.8									120.7

HUDSON RIVER AT FORT EDWARD, N. Y.

This station, which is located at the dam of the International Paper Company, was established by Geo. W. Rafter in 1895, in connection with Upper Hudson storage surveys.* Since 1899 this station has been maintained by the U. S. Geological Survey in co-operation with this Department. The dam is of framed timber on slate rock foundation, and has but little leakage. The crest is straight, very nearly level, and 587.6 feet in length. Flash-boards are usually maintained on the dam from 15 inches to 18 inches in height. A record is kept of the height of flash-boards, and of the times of their setting and removal.

There are 62 water-wheels in the adjoining mill. These are nearly all of modern types which have been tested at the Holyoke flume. A record is kept of the daily run of each in hours, as well as of the working head, which is usually 19 feet. The discharge through the turbines is taken from diagrams expressing the flow as a function of the working head and number of wheel-hours run.

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* See report of State Engineer and Surveyor of New York, 1895, p 105.

In the winter of 1896–1897, a flood spillway was cut around the south end of the dam, over which the water begins to flow whenever it reaches the level of the crest of the flash-boards. The profile of the spillway is very irregular and causes some uncertainty in the calculated flow during times of high water.

Whenever the flash-boards are off from the main dam, the flow is computed by means of coefficients derived from the United States Geological Station experiments on a model dam of similar cross-section.

With the flash-boards on, the flow has been computed from Francis' well-known formula for the thin-edged weir. During the dry season, but little water passes over the dam, the entire flow being employed to drive the turbines.

A new profile of the crest of the dam, obtained in 1906, has been used to determine the discharge for the present year.

The drainage area tributary to the Hudson above Fort Edward is 0.62 of that of the same stream above Mechanicville gaging station. The principal intervening tributaries are the Hoosic river and Batten kill, having drainage areas of 730 and 460 square miles, respectively.*

During the navigation season, water is diverted from Hudson river at Glens Falls feeder dam, seven miles above Fort Edward, for the supply of the Champlain canal.

Current-meter measurements have been made in the Glens Falls feeder as follows:

By R. E. Horton and H. R. Beebe in 1904, *at Glens Falls, N. Y.*

DATE.	Water-surface below top of bridge seat.	Discharge.
		Second-feet.
August 25	9.57	302

By C. A. Poole in 1905, *at Change bridge below Guard-lock.*

DATE.	Width.	Area of section.	Mean velocity.	Water-surface below dock stick.	Discharge.
	Feet.	*Square feet.*	*Ft. per second.*	*Feet.*	*Second-feet.*
Sept. 25, 11 a. m.	42.2	262	1.13	1.5	295
Sept. 25, 3 p. m.	42.2	262	1.11	1.5	292

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* Water-power of the Upper Hudson river is described in report of New York State Engineer and Surveyor, 1895, pp. 124–154.

Mean Daily Discharge, Second-feet, of Hudson River at Fort Edward, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	8,392	9,962	6,343	10,763	12,006	10,837	7,940	3,662	2,175	3,143	3,168	3,843
2	7,569	5,937	5,338	10,532	12,637	7,723	13,065	3,174	3,756	2,738	3,293	5,902
3	5,740	5,586	4,351	10,147	13,658	8,529	11,354	4,229	5,006	2,616	1,693	4,355
4	5,674	5,548	10,572	10,579	13,275	8,782	9,046	1,685	2,904	2,882	4,274	4,016
5	6,434	5,995	12,421	12,110	13,280	5,845	10,672	3,563	1,931	2,409	2,630	2,366
6	5,461	4,139	10,709	11,517	12,959	4,781	9,208	4,030	5,124	2,063	2,207	2,803
7	8,703	3,876	10,058	10,339	12,639	5,140	5,913	3,634	3,493	3,840	2,763	3,887
8	6,266	4,425	9,309	10,070	11,629	6,287	7,351	2,870	2,215	2,653	2,660	3,382
9	3,891	4,348	8,632	10,579	12,386	7,105	6,728	2,630	4,091	2,493	2,738	3,289
10	3,469	2,160	7,264	9,358	11,376	10,262	5,156	2,432	3,871	2,291	1,320	3,051
11	3,154	6,030	6,858	8,217	11,054	11,356	5,240	1,666	2,843	2,616	4,091	2,099
12	3,540	5,492	6,534	8,383	9,389	12,976	4,841	769	2,739	2,368	2,904	2,520
13	2,200	4,054	6,229	8,968	9,550	9,126	4,552	2,468	2,728	1,472	3,478	2,396
14	6,030	4,548	4,520	10,741	12,384	7,977	2,188	2,354	2,259	3,588	2,127	2,565
15	5,740	4,590	4,327	22,379	14,774	7,171	5,612	1,694	1,816	2,491	2,930	2,881
16	4,351	3,775	4,253	23,026	11,753	2,262	5,865	1,512	3,233	2,409	3,025	1,972
17	4,742	1,493	2,083	27,046	9,556	5,865	3,744	1,602	2,697	2,572	1,459	4,991
18	4,640	6,984	5,672	27,687	10,087	9,108	3,311	830	2,638	2,572	6,534	3,994
19	3,720	4,821	4,779	27,687	9,642	8,533	3,238	4,094	2,616	2,409	4,140	3,950
20	1,726	4,343	3,381	28,467	9,837	8,442	2,289	2,284	2,904	1,871	4,260	3,419
21	6,374	3,730	3,208	27,023	8,618	7,237	870	3,644	2,885	2,235	6,346	3,744
22	7,397	4,371	3,490	25,000	7,890	5,928	324	3,092	1,756	6,951	7,034	3,364
23	8,014	5,795	3,705	26,796	5,238	4,892	4,226	3,707	4,091	4,245	8,521	5,604
24	14,158	5,498	2,216	24,096	7,253	8,180	2,892	3,634	3,456	3,781	7,099	5,845
25	18,047	6,984	5,139	20,824	7,981	8,910	2,718	1,896	2,867	3,787	7,115	2,235
26	17,080	8,069	3,429	17,726	8,076	6,816	2,325	1,546	2,225	3,146	7,789	3,825
27	14,350	7,640	3,764	14,875	9,979	6,172	2,026	4,924	2,742	2,412	6,203	2,390
28	13,788	7,274	4,916	11,009	14,811	4,353	1,116	3,512	2,823	4,823	6,268	2,718
29	12,314	......	9,163	11,523	14,342	3,818	4,187	3,405	1,823	6,555	7,464	2,906
30	12,197	......	9,556	11,517	12,637	1,674	4,743	2,910	3,504	3,953	7,539	1,841
31	9,872	......	9,746	......	12,384	......	3,515	3,519	......	3,522	......	4,343
Mean	7,582	5,267	6,209	16,299	11,067	7,203	5,042	2,806	2,974	3,126	4,436	3,435

Monthly Discharge of Hudson River at Fort Edward, N. Y.

[Drainage area, 2,800 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1906.					
January	18,047	1,726	7,582	2.71	3.12
February	9,962	1,493	5,267	1.88	1.96
March	12,421	2,083	6,209	2.22	2.56
April	28,467	8,217	16,299	5.81	6.48
May	14,811	5,238	11,067	3.95	4.55
June	12,976	1,674	7,203	2.57	2.87
July	13,065	324	5,042	1.80	2.07
August	4,924	830	2,806	1.00	1.15
September	5,124	1,756	2,974	1.06	1.18
October	6,951	1,472	3,126	1.11	1.28
November	8,521	1,320	4,436	1.58	1.76
December	5,902	1,841	3,435	1.23	1.42

HUDSON RIVER AT BRIDGE ST., FORT EDWARD, N. Y.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River at Bridge St., Fort Edward, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1					126.2	119.6	119.1	119.0	119.2	120.5	119.6	118.9
2					126.0	119.6	119.2	119.0	119.1	120.6	119.4	119.0
3					125.8	119.5	119.1	118.9	119.0	120.4	119.3	119.0
4					125.3	119.4	119.0	118.8	118.8	119.9	119.2	119.0
5					124.9	119.6	118.8	118.8	119.2	119.7	119.3	119.6
6					124.3	119.4	119.1	118.9	119.3	119.7	119.1	118.9
7					123.2	119.4	119.2	118.8	119.2	119.4	119.3	118.7
8					122.1	119.6	118.9	119.0	119.2	119.2	119.2	118.9
9					121.6	119.9	118.9	118.9	119.4	118.9	119.4	118.9
10					121.2	120.9	118.8	118.8	118.9	118.8	119.1	118.9
11				127.9	120.8	121.0	118.9	119.0	118.8	119.0	118.9	118.7
12				127.3	120.5	121.0	119.0	118.9	119.3	119.0	119.6	119.6
13				126.6	120.4	120.8	118.9	118.9	119.0	119.9	118.8	118.7
14				125.4	120.2	120.6	118.8	118.9	119.1	119.8	119.3	119.5
15				124.2	120.5	120.4	118.9	119.0	119.2	119.6	118.9	118.9
16				123.6	121.1	120.1	118.9	118.8	119.0	119.4	118.8	119.1
17				123.0	121.2	119.8	118.8	119.0	119.1	119.6	119.0	119.1
18				122.4	121.1	119.9	118.9	119.0	118.2	119.3	119.0	118.9
19				122.0	120.7	119.7	118.9	118.8	119.5	119.2	119.0	118.9
20				122.3	120.5	119.3	118.8	118.9	119.2	119.2	118.9	118.9
21				122.0	121.1	119.0	118.9	118.8	119.0	119.3	119.4	118.9
22				122.1	121.1	119.1	118.8	119.0	119.1	123.3	118.9	118.9
23				120.9	121.2	119.2	118.9	118.9	119.1	124.5	118.9	118.7
24				121.3	121.2	119.0	118.8	118.8	118.2	123.9	118.9	119.7
25				121.7	121.2	118.8	118.8	119.0	118.2	123.0	118.7	119.1
26				122.8	120.7	118.9	118.9	119.1	119.6	122.0	118.9	119.1
27				121.6	120.3	119.0	118.8	118.9	119.8	121.3	119.6	119.6
28				123.9	120.0	119.0	118.9	119.1	119.7	120.6	118.9	119.5
29				124.2	119.9	118.9	118.9	119.2	119.4	120.2	119.0	119.5
30				126.0	119.7	118.8	118.8	119.1	119.4	119.7	119.0	119.5
31					119.8			119.3		119.8		119.5

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River at Bridge St., Fort Edward, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	119.7	118.5	119.1	128.9	121.1	119.2	120.4	120.4	118.3	119.1	119.3	119.1
2	119.9	118.5	119.1	128.1	121.1	119.1	120.1	120.3	118.7	119.5	119.4	119.3
3	119.5	119.3	119.0	126.7	120.9	119.1	121.6	120.0	119.0	119.3	119.6	119.8
4	119.5	118.8	119.0	125.1	121.0	118.4	122.7	119.7	120.9	119.3	119.6	120.7
5	119.5	119.1	118.6	124.9	120.8	119.1	122.8	119.6	123.2	119.3	119.6	119.5
6	119.5	119.6	119.0	125.6	120.7	118.9	122.3	118.6	123.6	119.1	119.6	119.1
7	119.3	119.1	118.6	125.8	120.6	118.7	121.4	119.3	122.7	118.9	119.6	119.4
8	118.9	119.1	118.6	124.8	120.4	119.4	120.6	119.3	122.2	118.4	119.6	120.1
9	119.8	119.3	118.9	123.8	120.1	119.9	120.3	119.4	121.4	119.1	119.6	119.7
10	119.3	119.3	118.7	122.9	120.1	121.7	120.1	119.3	120.3	119.1	119.6	119.9
11	119.5	118.8	118.7	122.6	120.1	120.4	119.9	119.3	120.5	118.9	119.6	119.7
12	119.5	118.7	118.0	123.2	119.9	119.3	119.6	119.3	120.1	118.9	119.5	119.5
13	119.3	119.9	118.8	123.5	119.9	119.7	119.6	118.7	120.2	118.9	119.6	119.5
14	119.3	119.2	118.5	123.3	119.6	119.9	119.4	119.4	120.0	119.9	119.6	119.6
15	119.3	119.1	118.7	123.0	119.6	119.9	118.8	119.3	119.8	119.8	119.6	119.5
16	119.9	119.1	118.7	123.0	119.8	119.7	118.5	119.3	119.3	119.6	119.4	119.3
17	119.1	119.1	118.7	122.2	119.6	119.7	119.3	119.3	118.8	119.5	119.5	118.4
18	119.1	119.0	118.6	121.5	119.7	121.7	119.3	119.8	120.1	119.5	119.2	119.1
19	119.1	118.3	118.0	121.0	119.6	121.2	119.2	119.7	121.2	119.5	118.9	118.8
20	119.1	119.2	119.4	120.5	119.3	121.1	119.3	119.3	121.9	119.5	119.1	118.9
21	119.1	119.2	119.7	120.3	119.1	122.3	119.3	119.5	122.4	119.7	118.9	118.9
22	119.6	119.1	120.0	122.1	119.8	123.0	119.1	119.5	122.1	119.7	118.9	119.1
23	119.6	119.0	119.9	123.0	119.3	122.7	117.9	118.9	121.3	119.7	118.9	119.1
24	119.3	118.9	119.8	122.9	119.3	121.8	119.1	118.9	120.8	119.5	118.9	119.1
25	119.0	119.1	119.8	122.6	119.3	121.1	119.1	118.9	120.4	119.6	118.9	119.1
26	119.1	118.5	121.0	121.4	119.2	121.1	119.1	118.9	120.1	119.5	118.1	119.1
27	119.5	119.3	122.0	121.4	118.9	121.3	118.9	118.4	119.7	119.3	119.1	119.0
28	119.2	119.0	122.8	120.9	118.6	122.0	119.1	118.9	119.5	119.3	118.8	119.1
29	118.9		123.5	120.7	119.6	121.6	119.1	118.6	119.5	119.1	119.1	118.9
30	119.4		125.9	120.9	119.3	121.0	116.3	118.6	119.5	119.5	119.1	119.1
31	118.8		128.7		119.1		119.9	118.5		119.3		119.6

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River at Bridge St., Fort Edward, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	119.17	119.87	119.47	120.17	120.07	120.57	118.87	119.07	119.57	120 47	120.57	121.07
2	119.57	119.57	119.07	120.07	120.67	120.07	121.07	118.87	119.47	120.47	120.62	120 57
3	119.27	119.57	119.07	120.17	121.07	119.77	120.57	119.07	120.17	120.27	120.57	121.07
4	119.27	119.07	121.07	120.47	121.07	119.67	120.27	118.57	120.57	120.27	120.57	121.47
5	119.57	119.07	121.57	120.87	121.57	119.27	120.57	118.57	119.82	120.27	120.57	120.27
6	119.57	119.67	120.42	120.77	121.07	119.17	120.07	119.07	120.72	120.27	120.57	119.87
7	119.47	119.27	120.07	120.87	120.97	119.27	119.72	119.07	120.97	119.57	120.57	120.47
8	119.87	119.27	119.62	120.57	120.87	119.27	118.87	119.07	120.57	120.17	120.67	120.47
9	119.52	119.27	119.57	120.57	120.87	119.57	119.27	119.07	120.57	120.07	120.57	119.97
10	119.27	119.42	119.42	120.27	120.67	119.87	119.27	119.07	120.67	120.07	120.57	120.57
11	119.27	119.07	119.07	120.87	120.57	120.07	119.27	118.82	120.47	120.07	120.57	120.57
12	119.27	119.67	119.27	120.87	120.57	120.87	119.27	118.17	120.47	120.07	120.57	120.57
13	119.27	119.87	119.27	120.07	120.37	120.07	119.07	119.17	120.27	120.07	120.57	120.57
14	119.07	119.67	119.27	120.87	122.07	119.67	118.77	118.47	120.27	120.07	120.57	120.57
15	119.07	119.67	119.27	123.12	121.82	119.47	118.57	118.67	120.27	120.07	120.62	120.57
16	119.07	119.67	119.07	124.77	120.82	118.97	119.07	118.47	120.07	120.07	120.07	119.67
17	119.07	119.37	118.77	125.52	120.32	118.77	119.07	118.47	120.47	120.07	120.07	120.67
18	119.07	119.07	118.97	125.57	120.37	119.67	119.07	118.47	120.57	119.87	119.97	120.67
19	119.07	119.47	118.97	125.57	120.07	119.87	118.67	117.97	120.47	119.87	120.67	121.27
20	119.07	119.27	118.87	125.72	119.87	119.57	118.67	118.57	120.47	120.07	120.87	120.73
21	119.17	119.27	118.67	125.72	119.72	119.57	118.07	119.07	120.47	120.07	121.27	120.57
22	119.27	119.57	118.77	125.57	119.77	119.37	117.87	118.87	120.47	121.07	121.27	120.57
23	119.77	119.57	119.27	125.57	119.57	119.47	119.07	118.87	120.07	120.57	121.57	120.07
24	122.27	119.57	118.87	125.07	119.47	119.47	118.97	118.87	120.52	120.57	121.57	120.57
25	123.07	119.57	118.37	123.87	119.72	119.47	118.87	118.47	120.27	120.57	121.27	120.57
26	122.47	120.07	118.57	123.07	120.07	119.47	118.67	118.27	120.27	120.67	121.07	120.73
27	121.87	119.77	118.57	122.32	120.32	119.47	118.67	119.07	120.27	120.67	121.07	120.57
28	121.07	119.67	119.87	122.07	121.32	119.27	118.57	119.07	120.27	120.47	121.27	120.57
29	121.07	......	119.87	121.07	122.07	119.07	118.27	119.07	120.47	120.97	121.57	120.47
30	120.87	......	120.07	120.77	121.07	118.47	119.07	119.07	120.57	120.57	121.57	120.87
31	120.07	......	120.07	......	121.17	......	119.27	119.57	......	120.57	......	120.87

HUDSON RIVER ABOVE DAM AT GLENS FALLS, N. Y.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River at Glens Falls, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1	......	......	......	......	268.7	262.8	261.1	261.3	261.5	264.7	263.5	261.9
2	......	......	......	......	268.3	262.6	262.7	259.9	261.6	264.9	263.3	261.9
3	......	......	......	266.1	268.0	262.5	262.8	260.4	261.5	264.2	263.1	262.9
4	......	......	......	265.9	267.7	262.2	262.8	260.3	262.6	263.8	263.0	263.1
5	......	......	......	265.8	267.3	263.0	261.8	260.3	263.2	263.6	263.2	262.1
6	......	......	......	266.2	266.6	262.9	262.1	263.1	262.9	263.3	263.4	261.1
7	......	......	......	266.3	266.3	264.2	261.4	263.2	262.4	263.0	262.9	261.9
8	......	......	......	266.6	265.7	263.3	261.0	262 5	262.1	262.8	262.7	262.0
9	......	......	......	267.3	265.3	264.1	260.7	260.5	261.9	263.2	262.6	261.4
10	......	......	......	268.8	265.3	264.8	262.5	260.3	261.6	262.3	262.4	262.2
11	......	......	......	269.4	264.6	264.5	261.4	261.2	262.7	263.0	262.3	263.3
12	......	......	......	269.0	264.1	264.9	260.5	260.4	262.3	263.6	263.1	262.4
13	......	......	......	268.3	263.7	264.1	261.0	260.8	260.9	263.7	263.2	261.5
14	......	......	......	267.3	263.6	263.5	261.4	262.3	......	263.7	262.8	261.7
15	......	......	......	266.6	263.8	262.9	261.7	261.3	261.9	263.4	262.4	261.5
16	......	......	......	266.1	263.4	262.8	261.3	259.9	261.4	263.9	262.0	261.6
17	......	......	......	266.0	264.1	262.6	262.7	259.9	261.8	263.2	262.3	262.1
18	......	......	......	265.4	264.1	262.3	261.5	260.0	262.8	262.8	261.9	263.0
19	......	......	......	265.1	263.8	262.9	260.9	260.4	262.8	262.7	262.0	262.4
20	......	......	......	265.0	264.4	262.0	260.4	259.8	262.3	262.5	262.7	261.5
21	......	......	......	264.8	264.4	261.2	260.0	263.2	262.1	262.6	262.7	261.5
22	......	......	......	264.6	265.1	261.2	259.6	263.9	262.0	267.0	261.4	261.3
23	......	......	......	264.6	264.6	261.6	259.3	264.0	262.0	268.0	261.8	261.3
24	......	......	......	265.0	263.7	261.5	262.3	263.8	262.1	267.2	260.6	262.1
25	......	......	......	265.1	263.5	260.9	261.0	263.4	263.2	266.4	262.3	263.0
26	......	......	......	265.7	263.5	262.5	259.6	263.1	263.4	265.7	262.6	263.1
27	......	......	......	266.0	263.5	262.1	259.3	262.7	263.6	265.1	263.0	262.7
28	......	......	......	266.5	263.7	260.1	259.5	263.0	263.5	264.7	262.7	262.1
29	......	......	......	267.4	264.0	259.8	260.6	262.5	263.4	264.5	262.1	263.2
30	......	......	......	268.1	263.6	260.2	260.9	261.5	263.7	264.5	261.5	263.0
31	......	......	......	......	263.0	......	262.7	261.4	......	263.8	......	263.3

HUDSON RIVER ABOVE FEEDER DAM NEAR GLENS FALLS, N. Y.

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River above Glens Falls Feeder Dam near Glens Falls, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1				287.4	283.6	282.2	283.3	283.1	281.5	282.3	282.4	282.6
2				286.8	283.7	282.2	283.5	283.0	281.7	282.2	282.4	282.6
3				286.2	283.4	282.0	284.1	282.6	282.3	282.1	282.3	282.8
4				286.2	283.5	282.1	284.5	282.6	283.4	282.1	282.4	283.1
5				285.9	283.3	282.0	284.3	282.4	284.5	282.1	282.8	283.0
6				285.7	283.2	281.8	284.1	282.3	284.7	282.1	282.7	283.0
7				285.8	283.0	282.0	283.6	282.1	284.5	282.0	282.8	283.0
8				285.3	283.0	282.5	283.4	282.0	284.2	282.0	282.9	283.0
9			281.9	284.9	283.1	283.2	283.1	282.1	283.7	282.0	282.9	283.0
10			281.6	284.4	283.1	284.0	283.0	282.0	283.4	281.9	282.9	282.8
11			281.6	284.3	283.1	283.1	282.6	282.0	283.1	281.8	282.8	282.4
12			281.5	284.7	282.8	282.8	282.5	281.9	283.0	281.8	282.7	282.2
13			281.6	284.8	283.2	282.7	282.4	282.0	283.0	282.6	282.6	282.4
14			281.7	284.8	282.8	283.0	282.4	281.9	282.8	282.7	282.5	282.3
15			281.7	284.6	282.7	282.8	282.3	281.9	282.8	282.6	282.4	282.2
16			281.7	284.6	283.0	282.5	282.2	281.9	282.6	282.5	282.4	282.2
17			281.7	284.2	282.8	282.3	282.1	282.6	282.5	282.4	282.4	281.9
18			281.6	283.9	282.8	282.4	282.2	282.7	282.8	282.3	282.3	282.0
19			281.5	283.5	282.6	283.5	282.4	282.5	283.6	282.6	282.3	282.0
20			281.8	283.3	282.6	283.7	282.4	282.4	283.8	282.7	282.1	282.0
21			282.3	283.3	282.6	284.2	282.3	282.0	284.1	282.7	282.2	282.3
22			282.4	284.2	282.6	284.5	282.1	282.0	284.0	282.7	282.2	282.4
23			282.4	284.5	282.4	284.5	282.1	281.8	283.7	282.7	282.1	282.5
24			282.4	284.4	282.3	284.0	282.0	281.9	283.3	282.5	282.7	282.5
25			282.5	284.3	282.3	283.6	281.9	281.9	283.3	282.5	282.6	282.4
26			282.7	283.9	282.2	283.4	281.9	281.8	282.6	282.3	281.7	282.4
27			283.2	283.8	282.3	283.8	281.9	281.5	282.7	282.3	281.9	282.2
28			283.6	283.5	282.5	284.0	281.9	281.5	282.5	282.1	281.9	282.2
29			284.0	283.5	282.4	283.7	281.9	281.5	282.4	282.5	281.9	282.1
30			285.1	283.5	282.3	283.5	281.6	281.5	282.4	282.3	282.2	282.6
31			286.4		282.4		282.8	281.5		282.2		282.8

Mean Daily Elevation of Water-surface (Barge Canal Datum) of Hudson River above Glens Falls Feeder Dam near Glens Falls, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	282.77	283.17	282.37	283.32	283.42	283.27	282.57	281.87	281.77	281.47	281.82	282.27
2	282.72	283.07	282.87	283.22	283.47	283.17	283.27	281.77	281.62	281.42	281.82	282.32
3	282.62	282.87	282.27	283.27	283.67	282.97	283.22	281.87	281.62	281.42	281.82	282.17
4	282.52	282.17	282.52	283.32	283.82	282.72	282.97	281.87	281.52	281.42	281.47	282.02
5	282.72	282.27	282.87	283.62	283.92	282.47	282.87	281.22	281.37	281.42	281.37	281.67
6	282.82	282.27	283.07	283.57	283.77	282.47	282.87	281.32	281.92	281.42	281.42	281.67
7	282.72	282.12	282.92	283.57	283.52	282.42	282.67	281.37	281.82	281.27	281.37	281.77
8	282.52	282.22	282.87	283.37	283.42	282.42	282.47	281.37	281.77	281.27	281.32	281.87
9	282.42	282.17	282.77	283.32	283.42	282.51	282.22	281.57	281.62	281.32	281.42	281.52
10	282.32	282.27	282.67	283.17	283.37	283.12	282.22	281.57	281.67	281.42	281.42	281.72
11	282.17	282.22	282.52	282.92	283.32	283.07	282.12	281.57	281.62	281.32	281.32	281.72
12	282.27	282.22	282.52	282.92	283.22	283.27	282.12	281.52	281.62	281.37	281.37	281.67
13	282.47	282.37	282.32	283.17	283.37	282.77	282.07	281.52	281.57	281.42	281.62	281.62
14	282.42	282.32	282.42	283.47	283.42	282.67	281.97	281.52	281.57	281.32	281.57	281.72
15	282.42	282.22	282.31	284.57	283.97	282.47	281.82	281.42	281.57	281.52	281.57	281.77
16	282.42	282.17	282.32	285.32	283.42	282.32	281.77	281.27	281.52	281.37	281.62	231.57
17	282.42	282.17	282.27	285.62	283.22	282.42	281.87	281.32	281.47	281.42	281.57	282.07
18	282.42	282.12	282.01	285.77	283.12	282.62	281.82	281.42	281.57	281.42	281.57	282.07
19	282.32	282.17	282.12	285.77	283.12	282.67	281.67	281.52	281.57	281.37	281.77	282.07
20	282.22	282.17	282.17	285.77	283.02	282.57	281.57	281.42	281.62	281.37	281.87	282.07
21	282.27	282.17	282.17	285.82	282.37	282.42	281.42	281.72	281.57	282.32	282.37	281.97
22	282.37	282.27	282.07	285.72	282.97	282.27	281.57	281.67	281.37	282.37	282.52	282.02
23	282.97	282.42	282.12	285.67	282.47	282.27	281.87	281.72	281.52	282.22	282.67	281.77
24	284.17	282.42	282.02	285.42	282.57	282.62	281.82	281.82	281.47	282.12	282.67	282.07
25	284.42	282.52	281.82	284.97	282.77	282.52	281.72	281.62	281.47	282.07	282.57	281.72
26	284.32	282.62	281.82	284.57	283.27	282.37	281.67	281.72	281.57	281.87	282.42	281.72
27	284.17	282.72	282.07	284.27	283.27	282.37	281.47	281.72	281.57	281.87	282.32	281.82
28	283.77	282.57	282.37	284.07	283.72	282.07	281.37	281.77	281.57	282.02	282.47	281.77
29	283.67		282.87	283.77	283.87	282.02	281.62	281.82	281.47	282.02	282.52	281.82
30	283.37		282.97	283.52	283.67	281.92	281.77	281.77	281.37	281.97	282.47	281.72
31	283.27		283.02		283.62		281.72	281.77		282.02		281.82

HUDSON RIVER AT CORINTH, N. Y.

Mean Daily Gage Height, in Feet, of Hudson River at Corinth, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	......	......	......	......	......	......	......	......	......	.4	.8	1.
2	......	......	......	......	......	......	......	......	......	.4	.8	1.
3	......	......	......	......	......	......	......	......	......	.3	.8	1.
4	......	......	......	......	......	......	......	......	......	.4	.8	.9
5	......	......	......	......	......	......	......	......	......	.4	.6	.8
6	......	......	......	......	......	......	......	......	......	.4	.6	.8
7	......	......	......	......	......	......	......	......	......	.3	.6	.7
8	......	......	......	......	......	......	......	......	......	.3	.4	.6
9	......	......	......	......	......	......	......	......	......	.3	.4	.5
10	......	......	......	......	......	......	......	......	......	.3	.4	.5
11	......	......	......	......	......	......	......	......	......	.3	.2	.5
12	......	......	......	......	......	......	......	......	......	.3	.4	.4
13	......	......	......	......	......	......	......	......	......	.2	.05	0.0
14	......	......	......	......	......	......	......	......	......	.2	.05	.6
15	......	......	......	......	......	......	......	......	......	.2	.05	.8
16	......	......	......	......	......	......	......	......	......	.2	.05	.8
17	......	......	......	......	......	......	......	......	......	.2	.05	.8
18	......	......	......	......	......	......	......	......	......	.2	.4	.8
19	......	......	......	......	......	......	......	......	......	.2	.6	.8
20	......	......	......	......	......	......	......	......	......	.2	1.	.8
21	......	......	......	......	......	......	......	......	......	.9	1.1	1.
22	......	......	......	......	......	......	......	......	......	.8	1.6	.8
23	......	......	......	......	......	......	......	......	......	.7	1.7	.7
24	......	......	......	......	......	......	......	......	......	.7	1.4	.6
25	......	......	......	......	......	......	......	......	......	.7	1.4	.5
26	......	......	......	......	......	......	......	......	......	.7	1.2	.5
27	......	......	......	......	......	......	......	......	......	.7	1.1	.5
28	......	......	......	......	......	......	......	......	......	.8	1.1	.5
29	......	......	......	......	......	......	......	......	......	.7	1.1	.6
30	......	......	......	......	......	......	......	......	......	.7	1.	.5
31	......	......	......	......	......	......	......	......	......	.8	......	.6

Discharge measurements made in Hudson River at Corinth, N. Y.

DATE.	Stream.	Width.	Area of section.	Mean velocity.	Gage height.	Discharge.
		Feet.	*Square feet.*	*Feet per second.*	*Feet.*	*Second-feet.*
1904.						
*July 30‡	Hudson river ...	....	1,220	2.20	126.16	2,600
*Aug. 25‡	Hudson river ...	....	1,500	3.08	126.92	4,480
*Sept. 10‡	Hudson river ...	....	1,150	2.12	126.03	2,360
*Sept. 26‡	Hudson river ...	....	1,440	2.81	126.87	3,910
*Sept. 28‡	Hudson river ...	....	1,500	2.99	126.95	4,360
*Oct. 2‡	Hudson river ...	....	1,930	3.78	127.92	7,050
*Oct. 22‡	Hudson river ...	....	3,050	6.07	130.45	17,970
1906.						
*Sept. 11§	Hudson river ...	507	994	1.68	125.9	1,670
*Sept. 12§	Hudson river ...	507	1,050	1.65	125.82	1,730
†Nov. 1§	Hudson river ...	488	1,650	1.56	126.12	2,580

*Measured from boat above highway bridge.
†Measured from up-stream side of highway bridge.
‡By H. D. Mears, International Paper Co.
§By C. C. Covert.

SACANDAGA RIVER AT NORTHVILLE, N. Y.

Observations taken once each day, beginning December 1, 1904. Observer, A. S. Pickard. A staff gage, 16 feet in length, is attached to the down-stream end of pier of highway bridge near railroad station.

Elevation of zero mark, 742.51.

Water sometimes goes below zero, and in such cases gage reading is taken from a minus scale attached to north end of west abutment of bridge.

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Sacandaga River at Northville, N. Y.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.												
1												741.0
2												741.0
3												741.0
4												741.0
5												741.9
6												740.9
7												740.8
8												740.8
9												740.8
10												740.8
11												740.8
12												740.8
13												740.7
14												740.7
15												740.6
16												740.6
17												740.6
18												740.6
19												740.5
20												740.5
21												740.5
22												740.5
23												740.5
24												740.5
25												740.5
26												740.5
27												740.5
28												741.4
29												741.5
30												741.5
31												741.6

* Gage defective in low water.

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Sacandaga River at Northville, N. Y.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	741.6	741.2	741.1	746.0	742.2	740.7	741.5	741.9	740.6	740.9	741.4	742.9
2	741.6	741.2	741.1	744.0	742.0	740.7	743.4	741.6	740.6	740.9	741.8	744.7
3	741.6	741.1	741.1	743.5	741.7	740.7	744.5	741.3	743.0	740.9	741.9	745.6
4	741.5	741.1	741.1	744.5	741.5	740.6	742.9	740.9	747.3	740.9	741.8	744.4
5	741.4	741.1	741.1	744.5	741.5	740.6	742.5	740.8	744.9	740.8	741.7	744.2
6	741.3	741.1	741.1	744.7	741.6	740.6	742.1	740.8	743.1	740.8	741.8	743.6
7	741.3	741.1	741.1	744.7	741.6	740.6	741.9	740.7	742.8	740.8	742.5	743.3
8	741.3	741.1	741.1	743.5	741.6	741.1	741.6	740.7	742.5	740.8	742.2	742.4
9	741.3	741.1	741.1	742.5	741.7	741.6	741.4	740.6	742.0	740.7	742.0	741.9
10	741.3	741.1	741.2	743.1	741.7	741.0	741.2	740.6	741.7	740.7	741.8	741.5
11	741.3	741.0	741.2	743.8	741.6	740.7	741.1	740.6	741.8	740.8	741.6	743.0
12	741.3	741.0	741.3	745.0	741.6	741.1	741.0	740.6	742.2	742.2	741.5	744.1
13	741.3	741.0	741.3	745.0	741.5	741.9	740.9	740.6	742.4	741.8	741.5	744.3
14	741.3	741.0	741.3	744.0	741.5	741.5	740.8	740.6	742.0	741.7	741.8	744.3
15	741.3	741.0	741.3	744.0	741.3	741.2	740.8	740.6	741.8	741.5	741.7	743.6
16	741.3	741.0	741.3	743.1	741.3	740.8	740.8	741.2	741.5	741.4	741.6	743.3
17	741.3	741.0	741.4	742.3	741.3	741.3	740.9	741.5	741.4	741.3	741.6	743.1
18	741.3	740.9	741.4	742.0	741.2	741.9	740.9	741.2	742.0	741.3	741.5	743.0
19	741.3	740.9	741.5	742.0	741.2	742.0	741.0	740.9	743.1	741.7	741.4	742.9
20	741.3	740.9	742.3	741.9	741.2	743.6	741.1	740.7	742.7	741.9	741.4	742.8
21	741.3	740.9	742.5	742.0	741.2	742.7	741.0	740.5	742.3	742.2	742.0	743.0
22	741.3	741.0	745.5	745.5	741.1	742.6	740.8	740.5	741.9	742.0	742.8	743.7
23	741.3	741.0	745.5	744.2	741.1	742.4	740.6	740.5	741.7	741.8	743.3	743.8
24	741.3	741.0	746.5	743.2	741.1	741.9	740.7	740.5	741.5	741.6	741.9	743.5
25	741.3	741.1	747.5	742.8	741.0	741.6	740.7	740.5	741.4	741.5	741.0	743.5
26	741.3	741.1	743.7	742.5	741.0	742.0	740.7	740.5	741.3	741.4	740.8	743.4
27	741.3	741.1	744.2	742.4	741.0	742.5	740.6	740.5	741.2	741.3	740.8	743.4
28	741.3	741.1	745.3	742.3	740.9	742.5	740.6	740.5	741.1	741.2	740.7	743.4
29	741.3	......	746.4	742.3	740.9	742.0	740.6	740.5	741.1	741.2	741.6	744.2
30	741.2	......	750.9	742.4	740.8	741.7	741.9	740.5	741.0	741.2	742.7	744.2
31	741.2	......	746.8	......	740.8	......	742.0	740.7	......	741.2	......	743.9

*Mean Daily Elevation of Water-surface (Barge Canal Datum) of Sacandaga River at Northville, N. Y.**

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	743.51	747.61	746.81	747.71	742.11	741.61	742.31	740.31	740.41	740.11	740.51	741.01
2	743.51	747.06	746.71	747.61	742.01	741.31	742.01	740.31	740.41	740.11	740.41	741.01
3	743.31	745.61	746.91	747.21	742.11	741.01	741.11	740.31	740.31	740.11	740.41	741.01
4	744.11	746.01	748.86	747.66	742.51	740.71	741.01	740.31	740.31	740.11	740.41	741.01
5	744.31	746.36	749.11	748.51	742.31	740.71	740.91	740.31	740.31	740.11	740.41	741.01
6	744.31	746.06	749.01	747.26	742.11	740.71	740.91	740.31	740.31	740.11	740.31	741.01
7	743.71	745.91	748.16	747.01	742.11	740.71	740.71	740.31	740.21	740.11	740.31	741.01
8	743.01	745.91	747.11	744.06	741.91	740.71	740.51	740.21	740.21	740.11	740.31	741.01
9	742.91	745.91	746.61	743.01	741.71	740.91	740.51	740.21	740.01	740.11	740.21	741.01
10	742.81	746.01	746.31	744.51	741.81	741.81	740.31	740.21	739.91	740.11	740.21	741.01
11	742.71	746.01	746.11	744.51	741.61	742.01	740.31	740.21	739.71	740.21	740.21	741.01
12	743.01	746.21	745.91	744.51	741.61	742.11	740.31	740.21	739.51	740.21	740.21	741.01
13	743.01	746.21	745.71	742.31	741.51	741.91	740.31	740.21	739.41	740.21	740.21	741.01
14	743.16	746.21	745.61	742.51	741.51	741.81	740.31	740.21	739.41	740.21	740.21	741.01
15	743.51	746.21	745.41	744.36	741.51	741.71	740.31	740.21	739.41	740.21	740.21	742.51
16	743.51	746.11	745.31	745.21	741.51	741.61	740.21	740.21	739.41	740.21	740.21	742.51
17	743.31	745.91	745.21	744.91	741.41	740.61	740.21	740.21	739.31	740.21	740.21	742.51
18	743.01	745.81	745.11	744.71	741.41	741.31	740.21	740.11	739.31	740.21	740.21	742.51
19	743.01	745.81	745.01	744.91	741.31	741.01	740.21	740.11	739.31	740.21	740.21	742.51
20	743.01	745.81	744.91	744.81	741.31	740.71	740.21	740.11	739.31	740.21	741.21	742.41
21	743.11	746.01	744.91	744.81	741.31	740.61	740.21	740.11	739.31	741.01	741.31	742.41
22	743.46	746.76	744.91	744.91	741.21	740.51	740.21	740.21	739.31	740.71	741.51	742.41
23	745.51	747.11	744.81	744.61	741.01	740.71	740.21	740.21	739.71	740.51	741.61	742.51
24	749.91	747.01	744.81	743.91	740.91	740.71	740.21	740.21	739.91	740.51	741.51	742.51
25	750.31	746.91	744.81	743.41	741.11	740.51	740.21	740.11	739.91	740.51	741.41	742.51
26	749.66	747.26	744.81	742.51	741.31	740.51	740.21	740.11	739.91	740.51	741.31	742.51
27	748.91	747.01	744.96	742.51	741.41	740.41	740.11	740.01	740.11	740.51	741.21	742.51
28	748.51	746.91	747.31	742.31	742.51	740.41	740.11	740.71	740.11	740.51	741.21	742.51
29	748.16	......	748.01	742.41	742.31	740.41	740.21	740.61	740.11	740.51	741.11	742.51
30	747.31	......	747.81	742.36	742.01	740.31	740.31	740.61	740.11	740.51	741.01	742.51
31	747.81	......	747.81	......	741.71	......	740.31	740.51	......	740.51	......	742.51

* Gage defective in low water.

INDIAN RIVER AT INDIAN LAKE, N. Y.

A record of the stage of water in Indian lake reservoir, located in the upper Hudson river basin, as described in preceding reports, has been continued. The stage of water in the reservoir is shown in the following table:

Daily Gage Height, in Feet, of Indian River at Indian Lake, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	33.42	31.75	23.83	15.54	28.33	32.50	34.25	32.71	26.83	16.75	10.04	6.83
2	33.50	31.58	23.54	15.33	28.83	32.42	34.50	32.58	26.58	16.42	9.83	6.67
3	33.58	31.42	23.25	15.17	29.25	32.33	34.62	32.54	26.42	16.17	9.67	6.50
4	33.67	31.25	23.00	15.17	29.67	32.25	34.62	32.50	26.25	15.92	9.50	6.75
5	33.75	30.92	22.92	15.33	30.08	32.33	34.58	32.42	26.08	15.67	9.29	7.00
6	33.79	30.75	22.58	15.58	30.38	32.42	34.62	32.33	25.92	15.42	9.08	7.08
7	33.83	30.46	22.29	15.75	30.67	32.50	34.58	32.25	25.42	15.08	8.92	7.25
8	33.88	30.17	22.00	15.92	30.92	32.67	34.58	32.13	25.00	14.75	8.75	7.50
9	33.92	29.92	21.67	16.04	31.12	32.83	34.54	32.00	24.92	14.50	8.58	7.75
10	33.71	29.62	21.33	16.17	31.33	32.92	34.50	31.92	24.17	14.25	8.42	7.92
11	33.50	29.33	21.00	16.33	31.50	32.42	34.50	31.83	23.75	14.00	8.25	8.08
12	33.29	29.00	20.67	16.50	31.75	32.50	34.46	31.71	23.33	13.75	8.13	8.17
13	33.08	28.67	20.33	16.67	32.00	32.58	34.42	31.58	22.92	13.50	8.00	8.25
14	32.92	28.33	20.00	16.92	32.25	32.62	34.42	31.42	22.58	13.25	7.83	8.33
15	32.75	28.00	19.79	17.67	32.46	32.67	34.38	31.29	22.21	13.00	7.62	8.00
16	32.58	27.71	19.42	18.67	32.67	32.75	34.33	31.21	21.83	12.75	7.50	7.75
17	32.42	27.42	19.21	19.50	32.62	32.88	34.29	31.13	21.50	12.50	7.38	7.58
18	32.17	27.08	19.00	20.50	32.58	33.00	34.25	31.00	21.08	12.25	7.25	7.42
19	32.00	26.83	18.67	21.50	32.50	33.08	34.21	30.83	20.67	12.00	7.25	7.25
20	31.83	26.58	18.33	22.58	32.38	33.17	34.17	30.58	20.33	12.00	7.25	7.00
21	31.75	26.33	18.00	23.58	32.25	33.21	34.13	30.29	20.00	11.88	7.21	6.83
22	31.67	26.08	17.79	24.58	32.17	33.33	33.92	29.92	19.62	11.67	7.25	6.67
23	31.75	25.67	17.42	25.50	32.08	33.42	33.83	29.58	19.25	11.50	7.25	6.50
24	32.08	25.42	17.25	25.96	32.08	33.50	33.67	29.17	18.92	11.25	7.29	6.33
25	32.33	25.08	17.00	26.42	32.17	33.58	33.42	28.83	18.58	11.21	7.25	6.17
26	32.42	24.75	16.75	26.83	32.33	33.62	33.29	28.50	18.25	11.08	7.21	6.00
27	32.42	24.42	16.58	27.17	32.54	33.67	33.17	28.25	17.92	10.96	7.17	5.83
28	32.33	24.08	16.33	27.42	32.67	33.75	33.08	28.00	17.58	10.88	7.08	5.67
29	32.21	......	16.08	27.67	32.75	33.83	33.00	27.67	17.25	10.67	7.00	5.50
30	32.08	......	15.92	28.00	32.67	33.92	32.92	27.33	17.00	10.54	6.92	5.33
31	31.96	......	15.75	......	32.58	......	32.83	27.08	......	10.25	......	5.29

The reservoir gates were open during the greater portion of the year, the closed periods being as follows:— January 1 to 7, April 5 to May 11, July 4 to 18, December 5 to 13. All dates are inclusive.

DELAWARE RIVER DRAINAGE BASIN.

DESCRIPTION OF BASIN.

The head waters of Delaware river rise in Delaware, Greene and Schoharie counties, N. Y., the source of the main stream, which is commonly known as West branch, to distinguish it from the smaller East or Pepacton branch, being a small lake almost on the line of Schoharie and Delaware counties, at an elevation of 1,886 feet above tide. From this lake it flows southwestward across central Delaware county to Deposit, where it receives Oquaga creek, a large tributary draining eastern Broome county, and turns abruptly to the southeast, forming the boundary line between New York and

Pennsylvania until Port Jervis is reached. Here it turns again to the southwest and flows for a distance of about 40 miles along the base of the Shawangunk range until it passes through the water gap, from which point it flows irregularly southward to Trenton. Below Trenton the course is in general southwestward to Delaware Bay. South of Port Jervis it forms the dividing line between Pennsylvania and New Jersey, and for a few miles it is the boundary between Delaware and New Jersey.

East branch rises at Grand Gorge in northeastern Delaware county, and flows parallel to West branch across southern Delaware county, uniting with the latter stream at Hancock.

The total length of the river from the mouth to the head of West branch is about 410 miles; its drainage area, measured at Philadelphia and including Schuylkill river, is 10,100 square miles, of which about 2,580 square miles lie in New York, 5,720 in Pennsylvania, and 1,800 in New Jersey. The river is tidal to Trenton, which lies also at the head of navigation.

The upper drainage area is relatively long and narrow, with numerous short, lateral tributaries. From its head streams in New York it flows in a tortuous course through a deep, narrow trough in an elevated table-land, the mean level of the plateau remaining nearly constant, the valley growing progressively deeper, and the river hills becoming higher and steeper. On leaving the plateau in Wayne and Pike counties, Pa., the river emerges into a broad, open valley, bordered on the west by fertile, cultivated flats, behind which rise numerous rolling hills, and on the east by the forest-covered flanks of the Kittatinny mountains. Passing through the mountains by means of the celebrated water gap, it descends obliquely southward across the entire Appalachian valley to the point where it enters the South mountains below Easton. The topography of this portion of its course is marked by no striking features, the surface of the country being elevated only 100 or 200 feet above the stream. Between Easton and Trenton the river is bordered by an alternation of hills and narrow intervening valleys, while below Trenton it becomes a wide, tidal stream, flowing between shores which are in many places only low banks of sand or gravel, and in others broad, slimy marshes, covered with reeds and grass.

The fall of the river is rapid; the bed is principally gravel, sand, and boulders, and at many places rock, and the banks are generally high.

The Delaware receives a number of important tributaries, among which may be mentioned Mongaup and Neversink rivers and Callicoon creek from New York; Lackawaxen, Lehigh, and Schuylkill rivers and numerous creeks from Pennsylvania, and Rancocas creek, Musconetcong river, and Maurice river from New Jersey.

EAST BRANCH, DELAWARE RIVER, AT HANCOCK, N. Y.

This station was established October 14, 1902, by Robert E. Horton, and has since been maintained by the U. S. Geological Survey in co-operation with this Department. It is located at the highway bridge one-half mile southeast of the Erie railroad station at Hancock, N. Y., and one mile above the junction with West branch of the Delaware. The Erie railroad bridge is just below the station.

The channel is straight for 600 feet above and 300 feet below the station. The current is swift. Both banks are of medium height and are not liable to overflow. The bed of the stream is composed of rocks and gravel. There are three channels at low water and five channels at high water. During low water the elevation of the water-surface at the station is lower than the water-surface on West branch of the Delaware, but the gage heights are probably not affected by backwater from West branch, as there is considerable fall between the gaging station and the junction of the branches.

Discharge measurements are made from the down-stream side of the five-span iron highway bridge to which the gage is attached. The bridge has a total span of 425.5 feet between abutments. The initial point for soundings is the face of the right abutment at the top.

A standard chain gage is attached to the lower chord of the second span from the left end of the bridge on the up-stream side

It was installed July 21, 1903, to replace the old wire gage. The gage datum was not changed. The length of the chain from the end of the weight to the marker is 32.43 feet. The gage is read twice each day by D. B. Van Etten. The bench mark is a circular chisel draft on the top of the left abutment on the down-stream side. It is marked "B. M." Its elevation is 27.93 feet above gage datum. The elevation of the top of the gage pulley is 32.40 feet above gage datum.

Daily Gage Height, in Feet, of East Branch, Delaware River, at Hancock, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	3.58	3.92	7.95	5.05	3.68	4.35	3.6	3.3	3.35	3.12	3.92	3.75
2	3.52	3.7	10.7	4.85	3.6	4.22	3.45	3.18	3.25	3.02	3.8	3.68
3	3.42	3.05	10.65	4.62	3.75	4.05	3.4	3.22	3.25	2.92	3.7	3.52
4	4.28	3.85	10.0	4.75	3.75	3.85	3.55	3.45	3.35	2.88	3.6	4.25
5	4.42	3.95	6.05	5.55	3.62	3.78	3.6	3.35	3.18	2.9	3.52	4.7
6	3.9	4.1	5.05	6.28	3.6	4.5	3.42	3.25	3.1	2.9	3.5	5.0
7	3.65	4.35	4.8	5.6	3.6	4.4	3.28	3.25	3.02	2.95	3.42	5.1
8	3.45	4.35	4.45	5.3	3.62	4.15	3.2	3.4	3.0	3.06	3.4	3.9
9	3.4	4.75	4.35	5.15	3.65	3.98	3.12	3.38	2.95	2.95	3.32	3.9
10	3.25	4.6	4.25	5.8	4.05	5.85	3.12	3.22	2.9	2.95	3.3	4.2
11	3.68	4.8	3.95	7.05	3.85	5.58	3.2	3.18	2.9	3.0	3.35	4.45
12	4.22	4.7	3.95	6.15	3.75	4.88	3.15	3.1	2.85	3.05	3.48	4.1
13	4.85	4.75	3.75	5.75	3.7	4.48	3.08	3.02	2.8	3.02	3.5	4.1
14	4.05	4.65	3.72	5.7	3.7	4.25	3.0	3.0	2.8	2.98	3.4	4.05
15	3.75	4.5	3.7	8.37	3.65	4.05	2.98	2.92	2.78	2.92	3.32	3.9
16	3.65	4.4	3.45	8.4	3.58	4.32	2.92	2.9	2.75	2.9	3.3	4.45
17	3.68	4.25	3.65	6.65	3.5	4.65	2.95	2.85	2.7	2.9	3.48	4.15
18	3.58	4.22	3.5	5.95	3.82	5.0	3.08	2.8	2.7	2.85	3.38	3.95
19	3.5	4.28	3.5	5.48	3.9	4.75	3.05	2.8	2.7	2.85	6.1	3.55
20	3.55	4.28	3.65	5.22	3.75	4.6	3.0	2.85	2.75	4.85	5.7	3.7
21	3.48	4.3	3.58	4.95	3.62	4.35	4.4	3.45	3.05	4.8	5.4	4.15
22	4.55	5.05	3.6	4.75	3.55	4.2	3.8	3.78	3.15	4.25	5.25	3.95
23	5.1	4.6	3.4	4.58	3.5	4.08	3.7	3.45	3.2	3.95	4.85	3.7
24	7.1	4.3	3.45	4.45	3.42	3.98	3.8	3.25	3.15	3.78	4.55	3.55
25	5.6	4.5	3.5	4.28	3.38	3.78	3.6	3.25	2.95	4.12	4.42	4.3
26	5.0	5.15	3.5	4.15	3.32	3.65	3.4	3.1	2.88	4.6	4.25	4.7
27	4.72	4.3	3.62	4.05	3.3	3.55	3.3	3.32	2.9	4.25	4.1	5.0
28	4.55	4.75	6.6	3.88	4.8	3.45	3.22	4.58	2.9	4.3	4.02	5.1
29	4.3	......	5.05	3.8	5.35	3.48	3.3	4.0	2.88	4.15	3.92	4.9
30	4.1	......	5.0	3.72	4.85	3.38	3.3	3.65	2.88	4.0	3.75	4.35
31	4.05	......	5.6	......	4.55	......	3.55	3.52	......	4.0	......	4.5

Channel full of needle ice during greater part of January. River frozen from February 1 to 22; ice from 0.3 to 0.75 foot thick. February 22 and 23 open channel. Open channel after March 4, although there was considerable needle and anchor ice up to about March 27. There was also anchor ice November 30 and December 4–6.

Discharge Measurements of East Branch, Delaware River, at Hancock, N. Y.

DATE.	Hydrographer.	Width.	Area of section.	Gage height.	Discharge.
1906.		*Feet.*	*Square feet.*	*Feet.*	*Second-feet.*
Mar. 29	Horton and Mott	335	1,150	4.88	4,010
Mar. 31	Horton and Mott	337	1,400	5.68	5,650
April 12	Covert and Weeks	337	1,560	6.10	7,400
April 13	Covert and Weeks	339	1,410	5.78	6,140
July 26	C. C. Covert	274	669	3.40	855
Oct. 6	C. C. Covert	260	490	2.90	343

Mean Daily Gage Height, in Feet, of West Branch, Delaware River, at Hancock, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	3.7	4.0	3.8	5.4	3.6	4.0	4.25	3.28	3.4	3.2	4.0	3.8
2	3.65	3.7	3.88	5.15	3.45	3.9	3.78	3.12	3.2	3.2	3.85	3.4
3	3.4	4.55	4.0	4.9	3.75	3.8	3.6	3.22	3.3	3.1	3.8	3.75
4	5.4	4.55	8.3	4.9	3.88	3.6	3.75	3.25	3.18	3.02	3.7	4.95
5	5.45	5.0	5.75	5.8	3.7	3.58	3.75	3.2	3.2	3.0	3.62	4.85
6	4.35	4.9	5.0	6.3	3.6	4.8	3.5	3.12	3.08	2.98	3.52	5.6
7	3.75	4.8	4.75	5.8	3.52	4.55	3.45	3.32	3.05	3.02	3.4	5.5
8	3.55	4.95	4.48	5.45	3.6	4.3	3.3	4.38	3.02	3.05	3.32	4.0
9	3.3	5.0	4.4	5.2	3.55	4.05	3.28	3.6	3.05	3.05	3.35	3.95
10	4.35	4.85	4.3	6.25	3.68	4.4	3.3	3.42	3.0	3.05	3.2	4.7
11	4.25	4.75	4.05	6.9	3.62	4.5	3.35	3.3	2.98	3.0	3.2	4.55
12	4.72	4.85	3.85	6.2	3.55	4.15	3.3	3.1	2.88	3.08	3.5	4.1
13	5.05	4.8	3.82	5.8	3.55	3.95	3.15	3.2	2.85	3.08	3.45	4.1
14	4.85	4.75	3.7	5.65	3.62	3.8	3.15	3.1	2.82	2.95	3.42	4.1
15	4.5	4.65	3.75	7.25	3.62	3.7	3.02	3.05	2.82	3.05	3.25	4.02
16	4.35	4.45	3.55	7.6	3.55	4.62	3.1	3.0	2.78	3.0	3.2	4.6
17	4.2	4.4	3.65	6.45	3.42	6.92	3.08	2.95	2.68	2.95	3.25	4.45
18	4.1	4.4	3.3	5.85	3.65	6.35	3.35	2.9	2.7	2.9	3.58	4.1
19	3.9	4.5	3.85	5.35	3.72	5.7	3.35	2.95	2.62	2.95	6.3	3.6
20	3.7	4.35	3.4	5.15	3.6	5.28	3.15	2.8	2.85	3.8	5.5	3.55
21	3.8	4.45	3.55	4 85	3.5	4.85	3.12	3.65	3.38	4.7	5.35	4.35
22	5.35	6.55	3.5	4.7	3.45	4.55	3.05	3.4	3.08	4.2	5.2	4.2
23	5.38	5.0	3.35	4.55	3.38	4.42	3.2	3.35	3.65	4.05	4.82	3.85
24	6.7	4.75	4.0	4.3	3.4	4.3	3.3	3.18	3.25	3.9	4.55	3.05
25	5.6	5.1	3.78	4.25	3.35	4.02	3.2	3.15	3.2	3.95	4.35	3.2
26	5.0	5.6	3.6	4.05	3.25	3.82	3.12	3.08	3.05	4.2	4.3	3.75
27	4.8	4.5	4.1	3.98	3.35	3.75	3.18	3.3	3.08	3.95	4.2	4.4
28	4 5	3.9	7.85	3.85	4.0	3.65	2.9	4.58	3.15	3.92	4.05	4.45
29	4.2	......	5.6	3.78	4.7	3.7	3.02	4.22	2.98	4.02	3.95	4.2
30	4.1	......	5.45	3.7	4.35	3.6	3.2	3.8	3.0	3.82	3.85	4.2
31	4.1	......	6.2	......	4.1	......	3.35	3.55	......	3.98	......	5.3

River obstructed by ice January 3 to March 2; clear channel from March 3 to 19, approximately, and more or less obstructed by ice and needle ice from this date to March 28.

The river seldom freezes solid at the gage and all readings are to water-surface, a channel about ten feet wide near the left bank being kept open by oil and hot water from a pumping station one-half mile above the gage.

There is considerable needle ice in the stream the greater part of the frozen period, which makes the discharge very uncertain. Attempts to make meter measurements here in 1904-5 were unsuccessful on account of needle ice.

Needle ice forming on the rifts a few hundred feet below the gage during the frozen period often causes backwater.

Discharge Measurements of West Branch, Delaware River, at Hancock, N. Y.

DATE.	Hydrographer.	Width.	Area of section.	Gage height.	Discharge.
1906.		*Feet.*	*Square feet.*	*Feet.*	*Second-feet.*
March 29	Horton and Mott........	243	949	5.50	3,620
March 31	Horton and Mott........	250	1,080	6.10	5,080
April 12	Covert and Weeks........	248	1,080	6.15	4,900
April 13	Covert and Weeks........	243	1,040	5.90	4,280
July 25	C. C. Covert............	196	349	3.22	315
Oct. 6	C. C. Covert............	200	335	3.02	235

Rating table for West Branch, Delaware River, at Hancock, N. Y., from January 1, to December 31, 1906.

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
Feet.	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*
2.60	100	3.70	695	4.80	2,130	6.20	5,230
2.70	130	3.80	790	4.90	2,300	6.40	5,780
2.80	165	3.90	890	5.00	2,470	6.60	6,340
2.90	205	4.00	1,000	5.10	2,650	6.80	6,920
3.00	245	4.10	1,120	5.20	2,840	7.00	7,510
3.10	290	4.20	1,250	5.30	3,040	7.20	8,120
3.20	340	4.30	1,380	5.40	3,250	7.40	8,740
3.30	400	4.40	1,520	5.50	3,470	7.60	9,380
3.40	465	4.50	1,660	5.60	3,700	7.80	10,020
3.50	535	4.60	1,810	5.80	4,190	8.00	10,680
3.60	610	4.70	1,970	6.00	4,700		

The above table is applicable only for open channel conditions. It is based upon 6 discharge measurements made during 1906 and measurements made in previous years. It is fairly well defined.

Mean Daily Discharge, Second-feet, of West Branch, Delaware River, at Hancock, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	695	......	......	3,250	610	1,000	1,320	388	465	340	1,000	790
2	652	......	......	2,740	500	890	771	300	340	340	840	465
3	......	......	1,000	2,300	738	790	610	352	400	290	790	742
4	......	......	11,670	2,300	870	610	742	370	330	254	695	2,380
5	......	......	4,060	4,190	695	595	742	340	340	245	627	2,220
6	......	......	2,470	5,500	610	2,130	535	300	281	237	550	3,700
7	......	......	2,050	4,190	550	1,740	500	413	267	254	465	3,470
8	......	......	1,630	3,360	610	1,380	400	1,490	254	267	413	1,000
9	......	......	1,520	2,840	572	1,060	388	610	267	267	432	945
10	......	......	1,380	5,360	678	1,520	400	479	245	267	340	1,970
11	......	......	1,060	7,210	627	1,660	432	400	237	245	340	1,740
12	......	......	840	5,230	572	1,180	400	290	197	281	535	1,120
13	......	......	810	4,190	572	945	315	340	185	281	500	1,120
14	......	......	695	3,820	627	790	315	290	173	225	479	1,120
15	......	......	742	8,280	627	695	254	268	173	267	370	1,020
16	......	......	572	9,380	572	1,840	290	245	158	245	340	1,810
17	......	......	652	5,920	479	7,270	281	225	124	225	370	1,590
18	......	......	400	4,320	652	5,640	432	205	130	205	595	1,120
19	......	......	840	3,140	714	3,940	432	225	106	225	5,500	610
20	......	......	......	2,740	610	3,000	315	165	185	790	3,470	572
21	......	......	......	2,220	535	2,220	300	652	452	1,970	3,140	1,450
22	......	......	......	1,970	500	1,740	267	465	281	1,250	2,840	1,250
23	......	......	......	1,740	452	1,550	340	432	652	1,060	2,160	840
24	......	......	......	1,380	465	1,380	400	330	370	890	1,740	267
25	......	......	......	1,320	432	1,020	340	315	340	915	1,450	340
26	......	......	......	1,060	370	810	300	281	267	1,250	1,380	742
27	......	......	......	978	432	742	330	400	281	915	1,250	1,520
28	......	......	10,200	840	1,000	652	205	1,780	315	912	1,060	1,590
29	......	......	3,700	771	1,970	695	254	1,280	237	1,020	945	1,250
30	......	......	3,360	695	1,450	610	340	790	245	810	840	1,250
31	......	......	5,230	......	1,120	......	432	572	......	978	......	3,040

Rating table for East Branch, Delaware River, at Hancock, N. Y., from January 1, 1906 to December 31, 1906.

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
Feet.	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*
2.50	135	3.70	1,300	4.90	3,710	6.20	7,365
2.60	175	3.80	1,450	5.00	3,960	6.40	8,025
2.70	225	3.90	1,610	5.10	4,215	6.60	8,730
2.80	285	4.00	1,780	5.20	4,475	6.80	9,460
2.90	355	4.10	1,960	5.30	4,740	7.00	10,210
3.00	440	4.20	2,150	5.40	5,010	7.20	10,980
3.10	540	4.30	2,350	5.50	5,285	7.40	11,760
3.20	650	4.40	2,560	5.60	5,565	7.60	12,560
3.30	770	4.50	2,780	5.70	5,850	7.80	13,360
3.40	890	4.60	3,000	5.80	6,140	8.00	14,200
3.50	1,020	4.70	3,230	5.90	6,435	8.20	15,040
3.60	1,160	4.80	3,470	6.00	6,735	8.40	15,920

The above table is applicable only for open-channel conditions. It is based upon 15 discharge measurements made during 1904–1906. It is fairly well defined between gage heights 2.9 feet and 7.5 feet.

Mean Daily Discharge, Second-feet, of East Branch, Delaware River, at Hancock, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	......	......	......	4,090	1,270	2,460	1,160	770	830	562	1,640	1,380
2	......	......	......	3,590	1,160	2,190	955	628	710	460	1,450	1,270
3	......	......	......	3,050	1,380	1,870	890	674	710	372	1,300	1,050
4	......	......	......	3,350	1,380	1,530	1,090	955	830	341	1,160	2,250
5	......	......	......	5,420	1,190	1,420	1,160	830	628	355	1,050	3,230
6	......	......	......	7,620	1,160	2,780	916	710	540	355	1,020	3,960
7	......	......	......	5,560	1,160	2,560	746	710	460	398	916	4,220
8	......	......	......	4,740	1,190	2,060	650	890	440	520	890	1,610
9	......	......	......	4,340	1,230	1,750	562	866	398	398	794	1,610
10	......	......	......	6,140	1,870	6,290	562	674	355	398	770	2,150
11	......	......	......	10,400	1,530	5,510	650	628	355	440	830	2,670
12	......	......	......	7,200	1,380	3,660	595	540	320	490	994	1,960
13	......	......	......	6,000	1,300	2,740	520	460	285	460	1,020	1,960
14	......	......	......	5,850	1,300	2,250	440	440	285	423	890	1,870
15	......	......	......	15,800	1,230	1,870	423	372	273	372	791	1,610
16	......	......	......	15,900	1,130	2,890	372	355	255	355	770	2,670
17	......	......	......	8,910	1,020	3,120	398	320	225	355	994	2,060
18	......	......	......	6,580	1,480	3,960	520	285	225	320	866	1,700
19	......	......	......	5,230	1,610	3,350	490	285	225	320	7,040	1,090
20	......	......	......	4,530	1,380	3,000	440	320	255	3,530	5,850	1,300
21	......	......	......	3,840	1,190	2,460	2,560	955	490	3,470	5,010	2,060
22	......	......	......	3,350	1,090	2,150	1,450	1,420	595	2,250	4,610	1,700
23	......	......	......	2,960	1,020	1,920	1,300	955	650	1,700	3,590	1,300
24	......	......	......	2,670	916	1,750	1,450	710	595	1,420	2,890	1,090
25	......	......	......	2,310	866	1,420	1,160	710	398	2,000	2,600	2,350
26	......	......	......	2,060	794	1,230	890	540	341	3,000	2,250	3,230
27	......	......	......	1,870	770	1,090	770	794	355	2,250	1,960	3,960
28	......	......	......	1,580	3,470	955	674	2,960	355	2,350	1,820	4,220
29	......	......	......	1,450	4,880	994	770	1,780	341	2,040	1,640	3,710
30	......	......	......	1,330	3,590	866	770	1,230	341	1,780	1,380	2,460
31	......	......	......	......	2,890	......	1,090	1,050	......	1,780	......	2,780

Monthly Discharge of East Branch, Delaware River, at Hancock, N. Y.

[Drainage area, 920 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1906.					
April	15,900	1,330	5,260	5.72	6.38
May	4,880	770	1,540	1.67	1.92
June	6,290	866	2,390	2.60	2.90
July	2,560	372	852	.926	1.07
August	2,960	285	801	.871	1.00
September	830	225	436	.474	.53
October	3,530	320	1,140	1.24	1.43
November	7,040	770	1,960	2.13	2.38
December	4,220	1,050	2,270	2.47	2.85

WEST BRANCH, DELAWARE RIVER, AT HANCOCK, N. Y.

This station was established October 15, 1902, by Robert E. Horton, and has since been maintained by the U. S. Geological Survey in co-operation with this Department. It is located one-half mile west of the Erie railroad station at Hancock, N. Y., and about one mile above the mouth of East branch.

The channel is straight for 400 feet above and 800 feet below the bridge. The current is swift. Both banks are high and rocky and are not subject to overflow. The bed of the stream is composed of earth and cobblestones.

Discharge measurements are made from the down-stream side of the bridge, at which the gage is located. The bridge has a single span of 235 feet. The initial point for soundings is the top of the face of the left abutment on the down-stream side. The bridge floor is marked at intervals of 5 feet with black paint.

The original wire gage was attached to the up-stream side of the bridge. It was replaced July 20, 1903, by a standard chain gage. The location and the gage datum were not changed. The length of the chain from the end of the weight to the marker is 30.44 feet. The gage is read twice each day by David Pulver, the collector of tolls at the bridge. The bench mark is a circular chisel draft on the up-stream corner of the left abutment. Its elevation is 24.25 feet above gage datum. The elevation of the top of the pulley is 30.54 feet above gage datum.

Mean Daily Gage Height, in Feet, of West Branch, Delaware River, at Hancock, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	3.7	4.0	3.8	5.4	3.6	4.0	4.25	3.28	3.4	3.2	4.0	3.8
2	3.65	3.7	3.88	5.15	3.45	3.9	3.78	3.12	3.2	3.2	3.85	3.4
3	3.4	4.55	4.0	4.9	3.75	3.8	3.6	3.22	3.3	3.1	3.8	3.75
4	5.4	4.55	8.3	4.9	3.88	3.6	3.75	3.25	3.18	3.02	3.7	4.95
5	5.45	5.0	5.75	5.8	3.7	3.58	3.75	3.2	3.2	3.0	3.62	4.85
6	4.35	4.9	5.0	6.3	3.6	4.8	3.5	3.12	3.08	2.98	3.52	5.6
7	3.75	4.8	4.75	5.8	3.52	4.55	3.45	3.32	3.05	3.02	3.4	5.5
8	3.55	4 95	4.48	5.45	3.6	4.3	3.3	4.38	3.02	3.05	3.32	4.0
9	3.3	5.0	4.4	5.2	3.55	4.05	3.28	3.6	3.05	3.05	3.35	3.95
10	4.35	4.85	4 3	6.25	3.68	4.4	3.3	3.42	3.0	3.05	3.2	4.7
11	4.25	4.75	4.05	6.9	3.62	4.5	3.35	3.3	2.98	3.0	3.2	4.55
12	4.72	4.85	3.85	6.2	3.65	4.15	3.3	3.1	2.88	3.08	3.5	4.1
13	5 05	4.8	3.82	5.8	3.55	3.95	3.15	3.2	2.85	3.08	3.45	4.1
14	4 85	4.75	3.7	5.65	3.62	3.8	3.15	3.1	2.82	2.95	3.42	4.1
15	4.5	4.65	3.75	7.25	3.62	3.7	3.02	3.05	2.82	3.05	3.25	4.02
16	4.35	4.45	3.55	7.6	3.55	4.62	3.1	3.0	2.78	3.0	3.2	4.6
17	4.2	4.4	3.65	6.45	3.42	6.92	3.08	2.95	2.68	2.95	3.25	4.45
18	4.1	4.4	3.3	5.85	3.65	6.35	3.35	2.9	2.7	2.9	3.58	4.1
19	3.9	4.5	3.85	5.35	3.72	5.7	3.35	2.95	2.62	2.95	6.3	3.6
20	3.7	4.35	3.4	5.15	3.6	5.28	3.15	2.8	2.85	3.8	5.5	3.55
21	3.8	4.45	3.55	4 85	3.5	4.85	3.12	3.65	3.38	4.7	5.35	4.35
22	5.35	6.55	3.5	4.7	3.45	4.55	3.05	3.4	3.08	4.2	5.2	4.2
23	5.38	5.0	3.35	4.55	3.38	4.42	3.2	3.35	3.65	4.05	4.82	3.85
24	6.7	4.75	4.0	4.3	3.4	4.3	3.3	3.18	3.25	3.9	4.55	3.05
25	5.6	5.1	3.78	4.25	3.35	4.02	3.2	3.15	3.2	3.95	4.35	3.2
26	5.0	5.6	3.6	4.05	3.25	3.82	3.12	3.08	3.05	4.2	4.3	3.75
27	4 8	4.5	4.1	3.98	3.35	3.75	3.18	3.3	3.08	3.95	4.2	4.4
28	4 5	3.9	7.85	3.85	4.0	3.65	2.9	4.58	3.15	3.92	4.05	4.45
29	4.2	......	5.6	3.78	4.7	3.7	3.02	4.22	2.98	4.02	3.95	4.2
30	4.1	......	5.45	3.7	4.35	3.6	3.2	3.8	3.0	3.82	3.85	4.2
31	4.1	......	6.2	......	4.1	......	3.35	3.55	......	3.98	......	5.3

River obstructed by ice January 3 to March 2; clear channel from March 3 to 19, approximately, and more or less obstructed by ice and needle ice from this date to March 28.

The river seldom freezes solid at the gage and all readings are to water-surface, a channel about ten feet wide near the left bank being kept open by oil and hot water from a pumping station one-half mile above the gage.

There is considerable needle ice in the stream the greater part of the frozen period, which makes the discharge very uncertain. Attempts to make meter measurements here in 1904–5 were unsuccessful on account of needle ice.

Needle ice forming on the rifts a few hundred feet below the gage during the frozen period often causes backwater.

Discharge Measurements of West Branch, Delaware River, at Hancock, N. Y.

DATE.	Hydrographer.	Width.	Area of section.	Gage height.	Discharge.
1906.		*Feet.*	*Square feet.*	*Feet.*	*Second-feet.*
March 29	Horton and Mott........	243	949	5.50	3,620
March 31	Horton and Mott........	250	1,080	6.10	5,080
April 12	Covert and Weeks........	248	1,080	6.15	4,900
April 13	Covert and Weeks........	243	1,040	5.90	4,280
July 25	C. C. Covert............	196	349	3.22	315
Oct. 6	C. C. Covert............	200	335	3.02	235

Rating table for West Branch, Delaware River, at Hancock, N. Y., from January 1, to December 31, 1906.

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
Feet.	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*
2.60	100	3.70	695	4.80	2,130	6.20	5,230
2.70	130	3.80	790	4.90	2,300	6.40	5,780
2.80	165	3.90	890	5.00	2,470	6.60	6,340
2.90	205	4.00	1,000	5.10	2,650	6.80	6,920
3.00	245	4.10	1,120	5.20	2,840	7.00	7,510
3.10	290	4.20	1,250	5.30	3,040	7.20	8,120
3.20	340	4.30	1,380	5.40	3,250	7.40	8,740
3.30	400	4.40	1,520	5.50	3,470	7.60	9,380
3.40	465	4.50	1,660	5.60	3,700	7.80	10,020
3.50	535	4.60	1,810	5.80	4,190	8.00	10,680
3.60	610	4.70	1,970	6.00	4,700		

The above table is applicable only for open channel conditions. It is based upon 6 discharge measurements made during 1906 and measurements made in previous years. It is fairly well defined.

Mean Daily Discharge, Second-feet, of West Branch, Delaware River, at Hancock, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	695	......	......	3,250	610	1,000	1,320	388	465	340	1,000	790
2	652	......	......	2,740	500	890	771	300	340	340	840	465
3	......	......	1,000	2,300	738	790	610	352	400	290	790	742
4	......	......	11,670	2,300	870	610	742	370	330	254	695	2,380
5	......	......	4,060	4,190	695	595	742	340	340	245	627	2,220
6	......	......	2,470	5,500	610	2,130	535	300	281	237	550	3,700
7	......	......	2,050	4,190	550	1,740	500	413	267	254	465	3,470
8	......	......	1,630	3,360	610	1,380	400	1,490	254	267	413	1,000
9	......	......	1,520	2,840	572	1,060	388	610	267	267	432	945
10	......	......	1,380	5,360	678	1,520	400	479	245	267	340	1,970
11	......	......	1,060	7,210	627	1,660	432	400	237	245	340	1,740
12	......	......	840	5,230	572	1,180	400	290	197	281	535	1,120
13	......	......	810	4,190	572	945	315	340	185	281	500	1,120
14	......	......	695	3,820	627	790	315	290	173	225	479	1,120
15	......	......	742	8,280	627	695	254	268	173	267	370	1,020
16	......	......	572	9,380	572	1,840	290	245	158	245	340	1,810
17	......	......	652	5,920	479	7,270	281	225	124	225	370	1,590
18	......	......	400	4,320	652	5,640	432	205	130	205	595	1,120
19	......	......	840	3,140	714	3,940	432	225	106	225	5,500	610
20	......	......	......	2,740	610	3,000	315	165	185	790	3,470	572
21	......	......	......	2,220	535	2,220	300	652	452	1,970	3,140	1,450
22	......	......	......	1,970	500	1,740	267	465	281	1,250	2,840	1,250
23	......	......	......	1,740	452	1,550	340	432	652	1,060	2,160	840
24	......	......	......	1,380	465	1,380	400	330	370	890	1,740	267
25	......	......	......	1,320	432	1,020	340	315	340	915	1,450	340
26	......	......	......	1,060	370	810	300	281	267	1,250	1,380	742
27	......	......	......	978	432	742	330	400	281	915	1,250	1,520
28	......	......	10,200	840	1,000	652	205	1,780	315	912	1,060	1,590
29	......	......	3,700	771	1,970	695	254	1,280	237	1,020	945	1,250
30	......	......	3,360	695	1,450	610	340	790	245	810	840	1,250
31	......	......	5,230	......	1,120	......	432	572	......	978	......	3,040

Monthly Discharge of West Branch, Delaware River, at Hancock, N. Y.
[Drainage area, 680 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1906.					
April	9,380	695	3,440	5.06	5.64
May	1,970	370	684	1.01	1.16
June	7,270	595	1,670	2.46	2.74
July	1,320	205	432	.635	.73
August	1,780	165	484	.712	.82
September	652	106	277	.407	.45
October	1,970	205	574	.844	.97
November	5,500	340	1,180	1.74	1.94
December	3,700	267	1,390	2.04	2.35

SUSQUEHANNA RIVER DRAINAGE BASIN.

DESCRIPTION OF BASIN.

Susquehanna river rises in Otsego lake, in northern Otsego county, N. Y., at an elevation of 1,193 feet above tide and flows in a general southerly direction into Chesapeake bay. Its course is in many places extremely tortuous, crossing the state boundary between New York and Pennsylvania three times. The entire length of the river is about 500 miles, and it drains an area of 27,400 square miles, of which 21,060 square miles lie in Pennsylvania, 6,080 in New York, and 260 in Maryland.

The topography of the basin varies widely in character. In New York the stream and its tributaries flow through a rolling and in places rather broken country, bounded on the north by a mountainous area. In this part of the course its bed is of gravel or sand, with occasional rock ledges, and its banks are moderately high and not extensively subject to overflow. In Pennsylvania the river enters a mountain region, its banks are high, and it winds and twists among the parallel ranges in a bed composed generally of drift materials, gravel, sand and boulders. In the lower part of its course, from Marietta to Havre de Grace, it occupies a broad, deep valley, varying in width from a few hundred feet to more than a mile, and is for the most part bounded on either shore by rocky bluffs and table-lands elevated from 100 to 500 feet above its waters.

Above the mouth of the West branch the fall of the stream is uniform and gradual; below that point the fall becomes more irregular, and at many places there are rapids where the stream flows over a rocky bottom. The elevation of the river at the mouth of the West branch is 400 feet above mean sea level at Havre de Grace, the distance between the two points being 125 miles. The slope is, however, extremely variable.

In early days a complete system of canals was built along the river from the New York state line to the bay, but these have been abandoned with the establishment of railroads. The head of navigation is at the fall line, near the mouth of the stream, but various stretches are navigable for flatboats.

SUSQUEHANNA RIVER AT BINGHAMTON, N. Y.

This station was established July 31, 1901, by Robert E. Horton, and has since been maintained by the U. S. Geological Survey in co-operation with this Department. It is located at the Washington street bridge, about 800 feet up-stream from the junction of Chenango and Susquehanna rivers.

On account of the unfavorable conditions produced by a rift, which extends diagonally across the stream underneath the Washington street bridge, discharge measurements are made at the Exchange street bridge, 1,900 feet up-stream.

A standard chain gage is attached to the up-stream side of the left span of the Washington street bridge. The gage is up-stream from the crest of the rift and over a stretch of smooth water extending to the dam, 2,800 feet above. Gage readings are unaffected by backwater from Chenango river at ordinary stages. The gage is read twice each day by William Ray Monroe. The bench mark is a chisel draft on the corner of the left bridge abutment on the up-stream side. Its elevation is 23.71 feet above gage datum..

Mean Daily Gage Height, in Feet, of Susquehanna River at Binghamton, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	3.62	3.3	3.1	8.12	2.91	4.0	3.12	2.08	2.2	1.98	2.75	2.9
2	3.28	3.02	3.08	6.42	2.91	3.65	3.66	2.08	2.2	2.02	2.65	2.92
3	2.95	2.72	3.0	5.45	3.46	3.33	3.26	2.1	2.15	2.02	2.6	2.85
4	3.08	2.72	6.9	5.27	5.01	3.17	2.99	2.22	2.15	2.0	2.45	2.48
5	4.02	2.62	9.3	6.45	4.31	3.0	2.79	2.08	2.1	2.0	2.4	2.8
6	4.45	2.82	6.35	7.59	3.78	3.85	2.74	2.0	2.12	2.0	2.32	3.5
7	3.55	2.85	4.6	6.72	3.58	4.23	2.44	2.0	2.1	1.95	2.28	6.12
8	3.1	2.68	4.1	5.82	3.44	3.75	2.41	2.78	2.1	2.0	2.25	3.92
9	2.88	2.55	3.75	5.42	3.28	3.15	2.36	2.38	2.02	2.02	2.22	3.48
10	2.72	2.62	3.6	7.12	3.21	3.45	2.42	2.22	2.05	1.98	2.2	3.52
11	2.88	2.68	3.5	9.35	3.28	4.05	2.64	2.15	2.02	2.0	2.22	3.8
12	2.8	2.98	3.18	8.49	3.14	4.3	2.54	2.05	1.9	1.98	2.32	3.65
13	3.0	2.42	3.08	7.19	3.01	3.55	2.42	2.05	1.9	1.98	2.4	3.42
14	3.2	2.45	2.92	6.47	2.98	3.13	2.29	2.02	......	1.92	2.42	3.45
15	3.08	2.48	2.88	8.92	3.06	2.86	2.23	1.98	1.85	2.0	2.4	3.5
16	2.95	2.45	2.67	9.64	2.95	2.86	2.08	1.95	1.88	2.0	2.42	5.9
17	2.92	2.52	2.79	9.14	2.9	3.64	2.13	1.92	1.88	2.0	2.3	5.9
18	3.1	2.52	2.72	6.54	3.0	4.22	2.28	1.9	1.9	1.98	2.45	4.75
19	3.05	2.38	2.67	5.88	3.03	4.86	2.31	1.85	1.75	2.0	5.18	3.45
20	2.85	2.35	2.47	5.01	2.85	4.42	2.31	1.9	1.8	4.25	6.1	3.1
21	2.98	2.45	2.67	4.61	2.7	3.86	2.28	2.0	1.85	3.8	5.82	3.2
22	4.75	4.0	2.85	4.36	2.5	3.39	2.23	2.28	1.92	3.6	5.12	3.4
23	7.55	5.8	2.85	4.44	2.47	3.06	2.15	2.3	1.92	3.0	4.88	3.1
24	9.6	5.32	2.42	4.26	2.43	2.96	2.33	2.45	1.92	2.62	4.2	2.75
25	8.1	5.2	2.39	3.88	2.4	2.82	2.21	2.28	2.02	2.5	3.65	2.7
26	5.95	5.78	2.42	3.56	2.85	2.60	2.21	2.15	2.08	2.58	3.45	3.05
27	4.8	5.18	3.59	3.36	4.43	2.56	2.16	2.38	2.02	2.52	3.28	2.65
28	4.32	3.6	9.72	3.16	7.55	2.44	2.05	2.55	1.95	2.7	3.2	2.65
29	3.95	......	9.35	3.04	7.7	2.56	2.08	3.15	1.95	2.68	3.22	2.6
30	3.62	......	7.17	2.94	5.9	2.64	2.12	2.82	1.9	2.6	3.1	2.65
31	3.4	......	9.42	......	4.7	......	2.05	2.55	......	2.62	......	4.5

River seldom freezes over at the gage. Considerable anchor ice during January and February and part of March, also December, which may have slightly decreased the flow for these months.

Discharge Measurements of Susquehanna River at Binghamton, N. Y.

DATE.	Hydrographer.	Width.	Area of section.	Gage height.	Discharge.
1906.		*Feet.*	*Square feet.*	*Feet.*	*Second-feet.*
July 24	C. C. Covert	207	1,260	2.33	1,670
Oct. 5	C. C. Covert	298	1,100	1.98	732
Nov. 9	C. C. Covert	305	1,210	2.25	1,070

Rating table for Susquehanna River at Binghamton, N. Y., from August 1, 1901, to December 31, 1906.

Gage. height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
Feet.	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*
1.75	210	3.90	5,255	7.20	15,260	11.60	30,860
1.80	315	4.00	5,510	7.40	15,920	11.80	31,580
1.90	525	4.10	5,770	7.60	16,590	12.00	32,300
2.00	740	4.20	6,030	7.80	17,270	12.20	33,020
2.10	960	4.30	6,300	8.00	17,950	12.40	33,740
2.20	1,180	4.40	6,570	8.20	18,650	12.60	34,470
2.30	1,400	4.50	6,845	8.40	19,350	12.[illegible]	35,210
2.40	1,625	4.60	7,125	8.60	20,060	13.00	35,950
2.50	1,855	4.70	7,405	8.80	20,780	13.50	37,820
2.60	2,085	4.80	7,690	9.00	21,500	14.00	39,720
2.70	2,315	4.90	7,980	9.20	22,220	14.50	41,650
2.80	2,545	5.00	8,280	9.40	22,940	15.00	43,600
2.90	2,785	5.20	8,880	9.60	23,660	15.50	45,550
3.00	3,025	5.40	9,495	9.80	24,380	16.00	47,500
3.10	3,265	5.60	10,120	10.00	25,100	16.50	49,500
3.20	3,505	5.80	10,760	10.20	25,820	17.00	51,500
3.30	3,755	6.00	11,400	10.40	26,540	17.50	53,500
3.40	4,005	6.20	12,040	10.60	27,260	18.00	55,500
3.50	4,255	6.40	12,680	10.80	27,980	18.50	57,500
3.60	4,505	6.60	13,320	11.00	28,700	19.00	59,500
3.70	4,755	6.80	13,960	11.20	29,420	19.50	61,500
3.80	5,005	7.00	14,600	11.40	30,140	20.00	63,500

NOTE.—The above table is applicable only for open-channel conditions. It is based on discharge measurements made during 1901–1906. It is well defined between gage heights 2 feet and 5 feet. The table has been extended beyond these limits, being based on one measurement at 16.3 feet.

Mean Daily Discharge, Second-feet, of Susquehanna River at Binghamton, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	4,560	3,760	3,260	18,300	2,810	5,510	3,310	916	1,180	696	2,430	2,780
2	3,700	3,070	3,220	12,700	2,810	4,630	4,660	916	1,180	784	2,200	2,830
3	2,900	2,360	3,020	9,650	4,160	3,830	3,660	960	1,070	784	2,080	2,660
4	3,220	2,360	14,300	9,030	8,310	3,430	3,000	1,220	1,070	740	1,740	1,810
5	5,510	2,130	22,600	12,800	6,330	3,020	2,520	916	960	740	1,620	2,540
6	6,700	2,590	12,500	16,600	4,960	5,130	2,410	740	1,000	740	1,440	4,260
7	4,380	2,660	7,120	13,600	4,460	6,160	1,720	740	960	630	1,360	11,800
8	3,260	2,270	5,770	10,800	4,100	4,880	1,650	2,500	960	740	1,290	5,300
9	2,740	1,970	4,880	9,500	3,700	3,380	1,530	1,580	784	784	1,220	4,260
10	2,360	2,130	4,500	15,000	3,530	4,130	1,670	1,220	850	696	1,180	4,300
11	2,740	2,270	4,260	22,800	3,700	5,640	2,180	1,070	784	740	1,220	5,000
12	2,540	2,980	3,460	19,700	3,360	6,300	1,950	850	525	696	1,440	4,630
13	3,020	1,670	3,220	15,300	3,050	4,380	1,670	850	525	696	1,620	4,060
14	3,500	1,740	2,830	12,800	2,980	3,340	1,380	784	470	567	1,670	4,130
15	3,220	1,810	2,740	21,100	3,170	2,690	1,250	696	420	740	1,620	4,260
16	2,900	1,740	2,250	23,800	2,900	2,690	916	630	483	740	1,670	11,100
17	2,830	1,900	2,520	22,000	2,780	4,600	1,030	567	483	740	1,400	11,100
18	3,260	1,900	2,360	13,200	3,020	6,030	1,360	525	525	696	1,740	7,540
19	3,140	1,580	2,250	10,100	3,100	7,840	1,420	420	210	740	8,880	4,130
20	2,660	1,510	1,790	8,280	2,660	6,570	1,420	525	315	6,160	11,700	3,260
21	2,980	1,740	2,250	7,130	2,320	5,160	1,360	740	420	5,000	9,250	3,500
22	7,540	5,510	2,660	6,440	1,860	3,980	1,250	1,360	567	4,500	8,640	4,000
23	16,400	10,800	2,660	6,700	1,790	3,170	1,070	1,400	567	3,020	7,980	3,260
24	23,700	9,180	1,670	6,160	1,690	2,930	1,470	1,740	567	2,130	6,030	2,430
25	18,300	8,880	1,600	5,200	1,620	2,590	1,200	1,360	784	1,860	4,630	2,320
26	11,200	10,800	1,670	4,400	2,660	2,290	1,200	1,070	916	2,040	4,130	3,140
27	7,690	8,880	4,480	3,900	6,700	1,990	1,090	1,580	784	1,900	3,700	2,200
28	6,300	4,500	24,000	3,410	16,400	1,720	850	1,970	630	2,320	3,500	2,200
29	5,380	......	22,800	3,120	16,900	1,990	916	3,380	630	2,270	3,560	2,080
30	4,560	......	15,100	2,880	11,100	2,180	1,000	2,590	525	2,080	3,260	2,200
31	4,000	......	22,900	......	7,400	......	850	1,970	......	2,130	......	6,840

Monthly Discharge of Susquehanna River at Binghamton, N. Y.
[Drainage area, 2,400 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1906.					
January	23,700	2,360	5,720	2.38	2.74
February	10,800	1,510	3,740	1.56	1.62
March	24,000	1,600	6,790	2.83	3.26
April	23,800	2,880	11,500	4.79	5.34
May	16,900	1,620	4,560	1.90	2.19
June	7,840	1,720	4,070	1.70	1.90
July	4,660	850	1,710	.712	.82
August	3,380	420	1,220	.508	.59
September	1,180	210	705	.294	.33
October	6,160	567	1,580	.658	.76
November	11,700	1,180	3,470	1.45	1.62
December	11,800	1,810	4,380	1.82	2.10
The year	24,000	210	4,120	1.72	23.27

CHENANGO RIVER AT BINGHAMTON, N. Y.

Chenango river rises in central Madison county, N. Y., in the towns of Eaton and Madison, flows southward, and unites with the Susquehanna at Binghamton. Its head-water valleys lie at an elevation of about 1,200 feet above tide. The elevation of its mouth above tide is 864 feet. Its length is, approximately, 70 miles, and its drainage area is 1,580 square miles.

The gaging station, which was established July 31, 1901, by Robert E. Horton, has since been maintained by the U. S. Geological Survey in co-operation with this Department. It is located at the Court street bridge, Binghamton.

The bridge to which the gage is attached stands squarely across the stream at a point where there is a good bed of gravel and small cobblestones and a smooth, uniform current. The channel is obstructed by three masonry piers supporting the four spans of the bridge, 79 feet clear width each, the bridge having a total length of 337 feet between abutments. A small rift between the station and the confluence of Chenango river with the Susquehanna, about 2,500 feet below, cuts off backwater at ordinary stages of the rivers. For periods during freshets or at times when there is an abnormal rise on one or both streams, either record may be affected by backwater and too great a discharge indicated.

A standard chain gage is attached to the hand-rail of the bridge on the up-stream side of the first span from the right bank. The gage is read by William Ray Monroe. The bench mark is a circular chisel draft on the up-stream corner of the bridge seat on the left abutment. Its elevation is 34.02 feet above gage datum.

In estimating the run-off of Chenango river, the area directly tributary to storage reservoirs, from which diversion is made to supply Erie canal, has been deducted from the total natural drainage area. The diversion area of six reservoirs at the head of Chenango river, whose outflow is turned into Erie canal through Oriskany creek, is 30 square miles. The diversion area of De Ruyter reservoir, at the head of Tioughnioga river, whose outflow is turned into Erie canal through Limestone creek, is 18 square miles. These two areas have been subtracted from the natural drainage area of 1,580 square miles, giving an effective area of 1,532 square miles. This estimate is approximate, as no allowance for direct inflow to feeder channels from additional areas, nor for waste into the original stream, has been made. The gross area, from which more or less run-off is diverted, is about 105 square miles.

Discharge Measurements of Chenango River at Binghamton, N. Y.

DATE.	Hydrographer.	Width.	Area of section.	Gage height.	Discharge.
1906.		*Feet.*	*Square feet.*	*Feet.*	*Second-feet.*
Oct. 3	C. C. Covert............	225	464	5.30	396
Nov. 8	C. C. Covert............	300	681	5.95	1,050

Mean Daily Gage Height, in Feet, of Chenango River at Binghamton, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1.................	7.65	6.88	5.99	11.36	6.32	7.25	7.23	5.58	5.5	5.28	6.68	6.5
2.................	7.32	6.02	6.22	9.74	6.22	6.88	7.36	5.5	5.4	5.28	6.55	6.55
3.................	6.92	5.82	6.19	8.81	8.22	6.58	6.76	5.5	5.4	5.28	6.38	6.48
4.................	7.1	6.02	11.02	8.71	8.56	6.43	6.46	5.68	5.5	5.28	6.25	5.92
5.................	8.1	6.22	12.47	10.23	7.64	6.25	6.33	6.2	5.42	5.3	6.18	5.8
6.................	7.78	6.12	9.09	11.07	7.52	7.13	6.21	5.9	5.42	5.28	6.12	6.78
7.................	7.15	6.0	7.62	9.9	7.26	7.2	6.01	6.2	5.4	5.25	6.02	10.05
8.................	7.0	6.02	5.72	9.07	6.96	6.84	5.93	6.02	5.3	5.72	5.9	7.48
9.................	6.52	5.92	6.92	8.73	6.76	6.34	5.89	5.82	5.28	5.65	5.88	6.98
10.................	6.3	5.95	6.72	10.37	6.94	6.72	6.76	5.45	5.15	5.58	5.82	7.25
11.................	6.4	5.95	6.47	12.9	6.76	7.07	7.31	5.62	5.2	5.6	5.8	7.48
12.................	6.5	5.98	6.39	11.83	6.56	7.27	7.03	5.72	5.2	5.75	6.28	7.12
13.................	6.5	5.88	6.27	10.45	6.49	6.57	6.53	5.75	5.0	5.6	6.22	6.85
14.................	6.6	5.95	6.19	9.75	6.99	6.24	6.26	5.58	5.12	5.6	6.22	6.88
15.................	6.5	5.82	6.08	12.07	7.06	6.12	6.09	5.52	5.25	5.5	6.1	6.9
16.................	6.45	5.82	6.04	13.03	6.46	6.22	5.96	5.42	5.22	5.48	6.08	10.4
17.................	6.62	5.8	5.98	11.3	6.38	6.57	5.93	5.42	5.05	5.42	6.0	9.6
18.................	6.6	5.75	5.94	9.6	6.68	7.17	6.01	5.38	5.08	5.32	6.18	8.35
19.................	6.5	5.8	5.91	8.73	6.63	7.97	5.93	5.3	4.95	5.3	9.12	7.05
20.................	6.4	5.75	5.71	8.17	6.33	7.94	5.88	5.3	5.0	8.7	9.2	6.7
21.................	6.68	5.87	5.98	7.73	6.21	7.27	5.90	5.82	5.3	8.3	8.5	6.9
22.................	8.9	8.25	6.06	7.6	6.05	6.87	5.8	6.18	5.4	7.5	8.38	7.1
23.................	11.5	9.02	5.96	7.65	5.95	6.54	5.68	5.8	5.32	6.85	8.25	6.8
24.................	13.45	8.29	5.91	7.4	5.93	6.4	5.65	5.8	5.38	6.48	7.42	6.2
25.................	11.65	8.35	5.81	7.03	5.88	6.24	5.58	5.52	5.48	6.42	7.05	6.0
26.................	9.35	8.89	5.78	6.79	6.33	6.12	5.5	5.4	5.38	6.58	6.85	6.0

Mean Daily Gage Height, in Feet, of Chenango River at Binghamton, N. Y.—Concluded.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
27	8.3	7.99	6.84	6.59	8.85	6.02	5.48	5.5	5.32	6.35	6.7	6.2
28	7.75	6.37	13.41	6.52	11.78	5.93	5.48	6.15	5.3	6.52	6.7	6.25
29	7.32	......	12 66	6.32	10.98	6.06	5.45	6.15	5.28	6.55	6.7	6.3
30	6.88	......	10.51	6.26	8.93	6.11	5.5	5.82	5.2	6.48	6.6	6.3
31	6.95	......	13.08	......	7.83	......	5.55	5.7	......	6.52	......	8.5

River seldom freezes over at the gage. Considerable needle ice during January, February and December, 1906.

Rating table for Chenango River at Binghamton, N. Y., from January 1, 1906, to Decembe 31, 1906.

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
Feet.	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*
4.90	115	6.20	1,360	7.50	3,220	9.60	6,790
5.00	175	6.30	1,490	7.60	3,375	9.80	7,140
5.10	240	6.40	1,625	7.70	3,535	10.00	7,500
5.20	315	6.50	1,760	7.80	3,695	10.20	7,860
5.30	396	6.60	1,900	7.90	3,855	10.40	8,220
5.40	480	6.70	2,040	8.00	4,020	10.60	8,590
5.50	570	6 80	2,180	8.20	4,355	10.80	8,970
5.60	665	6.90	2,325	8.40	4,695	11.00	9,350
5.70	765	7.00	2,470	8.60	5,040	12.00	11,250
5.80	875	7.10	2,615	8.80	5,390	13.00	13,250
5.90	990	7 20	2,765	9.00	5,740	14.00	15,300
6.00	1,110	7.30	2,915	9.20	6,090		
6.10	1,235	7.40	3,065	9.40	6,440		

The above table is applicable only for open-channel conditions. It is based upon discharge measurements made during 1901–1906. It is well defined between gage heights 5.3 feet and 10.0 feet. Above 10.0 feet, it is based on one high-water measurement.

Mean Daily Discharge, Second-feet, of Chenango River at Binghamton, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	3,460	2,300	1,100	10,000	1,520	2,840	2,810	646	570	380	2,010	1,760
2	2,940	1,900	1,390	7,030	1,390	2,300	3,000	570	480	......	1,830	1,830
3	2,350	898	1,350	5,410	4,390	1,870	2,120	570	480	......	1,600	1,730
4	2,620	1,140	9,390	5,230	4,970	1,670	1,710	745	570	380	1,420	1,010
5	4,180	1,390	12,200	7,910	3,440	1,420	1,530	1,360	498	396	1,340	875
6	3,660	1,260	5,900	9,480	3,250	2,660	1,370	990	498	380	1,260	2,150
7	2,690	1,110	3,410	7,320	2,860	2,760	1,120	1,360	480	355	1,130	7,590
8	2,470	1,140	787	5,860	2,410	2,240	1,030	1,140	396	787	990	3,190
9	1,790	1,010	2,350	5,270	2,120	1,540	978	898	380	715	967	2,440
10	1,490	1,050	2,070	8,170	2,380	2,070	2,120	525	277	646	898	2,840
11	1,620	1,050	1,720	13,000	2,120	2,570	2,930	685	315	665	875	3,190
12	1,760	1,090	1,610	10,900	1,840	2,870	2,510	787	315	820	1,460	2,640
13	1,760	967	1,450	8,310	1,750	1,860	1,800	820	175	665	1,390	2,250
14	1,900	1,050	1,350	7,050	2,460	1,410	1,440	646	255	665	1,390	2,300
15	1,760	898	1,210	11,400	2,560	1,260	1,220	589	355	570	1,240	2,320
16	1,690	898	1,160	13,300	1,710	1,390	1,060	498	331	552	1,210	8,220
17	1,930	875	1,090	9,920	1,600	1,860	1,030	498	207	498	1,110	6,790
18	1,900	820	1,040	6,790	2,010	2,720	1,120	463	227	413	1,340	4,610
19	1,760	875	1,000	5,270	1,940	3,970	1,030	396	145	396	5,950	2,540
20	1,620	820	776	4,300	1,530	3,920	967	396	175	5,220	6,090	2,040
21	2,010	956	1,090	3,580	1,370	2,870	990	898	396	4,520	4,860	2,320
22	5,560	4,440	1,180	3,380	1,170	2,280	875	1,340	480	3,220	4,660	2,620
23	10,300	5,780	1,000	3,460	1,050	1,820	745	875	413	2,250	4,440	2,180
24	14,200	4,510	1,000	3,060	1,030	1,620	715	875	463	1,730	3,100	1,420
25	10,600	4,610	886	2,510	967	1,410	646	589	552	1,650	2,540	1,110
26	6,350	5,550	853	2,170	1,530	1,260	570	480	463	1,870	2,250	1,170
27	4,520	4,000	2,240	1,890	5,480	1,140	552	570	413	1,560	2,040	1,360
28	3,620	1,580	14,100	1,790	10,800	1,030	552	1,300	396	1,790	2,040	1,420
29	2,940	......	12,600	1,520	9,300	1,180	525	1,300	380	1,830	2,040	1,490
30	2,300	......	8,420	1,440	5,620	1,250	570	898	315	1,730	1,900	1,490
31	2,400	......	13,400	......	3,740	......	618	765	......	1,790	......	4,860

Monthly Discharge of Chenango River at Binghamton, N. Y.
[Drainage area, 1,530 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1906.					
January	14,200	1,490	3,550	2.32	2.68
February	5,780	820	1,930	1.26	1.31
March	14,100	776	3,520	2.30	2.65
April	13,300	1,440	6,220	4.07	4.54
May	10,800	967	2,910	1.90	2.19
June	3,970	1,030	2,040	1.33	1.48
July	3,000	525	1,300	.850	.98
August	1,360	396	789	.516	.59
September	570	145	380	.248	.28
October	5,220	355	1,260	.824	.95
November	6,090	875	2,180	1.42	1.58
December	8,220	875	2,700	1.76	2.03
The year	14,200	145	2,400	1.57	21.26

CHEMUNG RIVER AT CHEMUNG, N. Y.

Chemung river is formed at Painted Post, N. Y., by the confluence of Tioga and Cohocton rivers. Cohocton river lies entirely in the state of New York. Tioga river receives, just above its mouth, Canisteo river, a large tributary, which also has its drainage basin in New York to the south of the Cohocton. The drainage area of Tioga river, above the Canisteo, is mainly in Pennsylvania. Chemung river flows southeastward through Corning, Elmira and Chemung, crosses the state line and flows for a short distance in Pennsylvania, then returns to New York, and crosses again to Pennsylvania near Waverly, finally emptying into the Susquehanna near Athens, Bradford county, Pa. The total length of the river is about 40 miles, of which 30 miles lie in New York; the drainage area, measured at the mouth, is 2,520 square miles.

The topographic features of the basin are, as a rule, bold and broad. The hills rise to a height of several hundred feet on either side, within a short distance of the stream. The upland plateau is to a large extent wooded, has impervious soil, no lake storage, and few marsh areas. Tributaries are ramifying and uniformly distributed, though not very numerous, and dry gullies, or flood channels, are common. The main river is sluggish, with low banks and a broad valley or flood plain, which is often overflowed. The concentration of storm waters from the three large streams, which unite just above Corning, makes possible excessive floods. Dikes have been erected in the cities of Elmira and Corning for protection. One of the highest recorded freshets in the stream occurred June 1, 1889. It was preceded by phenomenal rainfall, aggregating several inches in a few hours during the night of May 31. The discharge at this time has been estimated at 67 second-feet per square mile from 2,055 square miles, or 138,000 second-feet.[a]

The gaging station was established September 7, 1903, by R. E. Horton. It has since been maintained by the U. S. Geological Survey in co-operation with this Department. It is located at the suspension highway bridge, midway between Chemung, N. Y., and Willawana, Pa., near the state line.

The channel is straight for 700 feet above and 800 feet below the station. The right bank is high, cleared, and not subject to overflow; the left bank is of medium height, wooded, and will overflow at high water. The bed of the stream is composed of gravel and is clean and permanent. The current is good. There is but one channel at all stages.

Discharge measurements are made from the down-stream side of the bridge, which has a single span of 395 feet. The initial point for soundings is the face of the right abutment on the down-stream side.

A standard chain gage is attached to the up-stream side of the bridge, near the right bank, and is read twice each day by Daniel L. Orcutt. The bench mark is formed by three nails driven into a telephone pole 70 feet to the right of the initial point for soundings and about 30 feet up-stream. The pole is marked with black paint "U. S. G. S. B. M." Elevation of bench mark above gage datum, 29.88 feet.

The smooth water reaches of the stream become ice-covered in winter. Needle ice forms over the rapids and is carried under the surface ice. Much of the winter flow apparently filters through these beds of needle ice at times. The conditions render the estimation of the daily discharge in winter impracticable.

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[a] Report of Francis Collingwood, C. E., on the protection of the city of Elmira, N. Y., against floods.

Mean Daily Gage Height, in Feet, of Chemung River at Chemung, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	4.27	3.4	2.52	7.42	3.15	4.44	3.34	2.28	2.19	1.55	3.46	3.33
2	3.93	3.16	2.56	6.54	3.09	4.15	3.42	2.24	2.04	1.73	3.31	2.86
3	3.54	3.24	2.57	5.93	3.28	3.73	5.2	2.2	2.14	1.89	3.25	2.87
4	3.7	3.36	8.6	6.23	3.99	3.48	4.15	2.18	2.16	1.77	3.27	2.6
5	4.44	3.24	5.2	7.3	3.75	3.35	3.57	3.29	2.08	1.95	3.2	2.35
6	4.0	2.94	3.96	7.92	3.8	5.25	3.28	3.05	2.14	1.74	3.06	3.32
7	3.52	2.8	3.64	6.8	3.65	5.06	3.03	2.96	2.12	1.8	2.89	6.26
8	2.97	2.84	3.4	5.92	3.35	4.12	2.85	3.68	......	2.87	2.81	4.56
9	2.66	2.92	3.3	5.68	3.25	3.74	2.83	3.76	......	2.58	2.77	3.56
10	2.74	2.84	3.14	8.32	3.63	3.58	2.74	3.28	......	2.38	2.64	3.55
11	2.86	2.71	2.97	8.4	3.55	3.65	2.68	3.85	1.78	2.12	2.62	3.26
12	3.02	2.88	2.9	7.14	3.26	3.47	2.66	4.15	1.81	2.31	2.66	3.72
13	2.92	2.66	2.85	6.33	3.24	3.15	2.55	3.52	1.96	2.36	2.74	3.28
14	2.86	2.64	2.74	5.82	3.22	2.84	2.45	3.1	2.09	2.4	2.92	3.42
15	2.86	2.7	2.7	6.73	3.2	2.85	2.4	2.82	1.78	2.41	2.97	3.54
16	2.79	2.72	2.71	6.82	3.2	3.38	2.33	2.58	1.62	2.36	2.96	5.48
17	2.6	2.8	2.6	5.92	3.29	6.53	2.35	2.46	1.74	2.22	2.9	4.6
18	2.78	2.8	2.32	5.36	4.94	7.11	2.44	2.39	1.62	2.17	3.04	3.96
19	2.78	2.6	2.56	4.92	4.54	6.12	2.6	2.32	1.56	2.14	6.13	2.74
20	2.79	2.62	2.2	4.56	3.92	6.13	2.59	2.61	1.52	5.4	5.84	2.48
21	2.78	2.79	2.38	4.24	3.44	4.92	2.47	3.36	1.54	5.32	5.63	3.37
22	4.54	3.31	2.58	4.34	3.28	4.29	2.51	3.1	1.54	4.9	5.6	3.36
23	7.02	3.35	2.44	4.25	3.18	3.90	2.34	2.66	1.63	4.28	4.88	3.45
24	8.08	2.94	2.58	3.7	3.06	3.81	2.32	3.1	1.84	3.8	4.34	4.97
25	5.77	2.58	2.43	3.96	3.25	3.43	2.3	3.04	1.8	3.48	3.78	4.46
26	4.56	2.7	2.54	3.81	3.14	3.20	2.28	2.68	1.72	3.36	3.76	3.94
27	4.14	2.86	3.88	3.56	6.72	3.04	2.28	2.67	1.74	3.28	3.58	4.36
28	3.93	2.54	11.94	3.37	8.68	2.93	2.36	2.6	1.54	3.09	3.36	4.42
29	3.64	......	7.25	3.29	6.9	3.50	2.59	2.69	1.53	3.16	3.26	4.32
30	3.51	......	7.06	3 21	5.42	3.48	2.38	2.44	1.49	3.1	3.16	4.32
31	3.33	......	11.09	......	4.72	......	2.31	2.2	......	3.08	......	5.82

Shore ice during January. River frozen over from February 2 to latter part of February; ice about 0.4 foot thick. Considerable anchor ice during December. River frozen over December 25 to 30.

Discharge Measurements of Chemung River at Chemung, N. Y.

DATE.	Hydrographer.	Width.	Area of section.	Gage height.	Discharge.
1906.		*Feet.*	*Square feet.*	*Feet.*	*Second-feet.*
Feb. 17[a]	Covert and Weeks	225	1,040	2.85	674
March 30	Horton and Mott	393	2,560	7.20	9,850
March 31	R. E. Horton	395	4,340	11.73	27,500
March 31	R. E. Horton	394	4,120	11.40	25,600
July 27	C. C. Covert	200	935	2.29	416
Sept. 15	C. C. Covert	186	860	1.89	216
Oct. 4	C. C. Covert	203	879	2 03	381

[a] Ice conditions; gage height to bottom of ice, 2.42 feet; average thickness of ice, 0.53 foot; considerable needle ice.

Rating table for Chemung River at Chemung, N. Y., from January 1, 1905, to December 31, 1906.

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Dischaige.	Gage height	Discharge.
Feet.	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*
1.50	85	3 10	1,110	4.70	3,610	7.20	9,790
1.60	115	3.20	1,220	4.80	3,820	7.40	10,390
1.70	145	3.30	1,335	4.90	4,030	7.60	11,010
1.80	180	3.40	1,455	5.00	4,240	7.80	11,650
1.90	220	3.50	1,580	5 10	4,460	8.00	12,300
2.00	270	3 60	1,710	5.20	4,680	8.20	12,970
2.10	325	3.70	1,850	5 30	4,900	8.40	13,650
2.20	385	3 80	2,000	5.40	5,130	8.60	14,350
2 30	450	3 90	2,160	5.60	5,590	8.80	15,070
2.40	515	4 00	2,320	5.80	6,060	9.00	15,800
2 50	585	4 10	2,480	6.00	6,550	10 00	19,700
2 60	660	4 20	2,650	6.20	7,070	11.00	24,000
2.70	740	4 30	2,830	6 40	7,590	12.00	28,700
2.80	825	4 40	3,010	6.60	8,130	13 00	33,500
2.90	915	4.50	3,200	6 80	8,670	14.00	39,300
3.00	1,010	4.60	3,400	7.00	9,220		

The above table is applicable only for open-channel conditions. It is based upon discharge measurements made during 1903-1903. It is well defined between gage heights 1.9 feet and 12.0 feet.

Mean Daily Discharge, Second-feet, of Chemung River at Chemung, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1905.												
1	1,770			6,420	1,430	450	1,060	1,110	220	204	424	1,680
2	1,660			4,680	1,220	298	1,520	962	292	200	476	897
3	1,150			3,720	1,220	418	4,280	782	314	250	622	4,140
4	816			3,200	1,060	450	2,000	585	314	281	557	6,970
5	615			3,300	825	355	1,400	585	292	385	543	3,950
6	1,050			3,780	825	450	1,160	502	292	286	585	2,870
7	2,460			4,240	843	482	962	463	281	212	557	2,350
8	5,920			3,610	962	1,340	843	450	250	204	852	2,220
9	3,380			3,100	843	1,200	915	418	250	208	791	2,460
10	2,460			2,690	724	962	1,010	450	220	204	791	2,670
11	1,940			3,610	660	825	962	398	220	200	724	2,350
12	1,570			4,720	645	870	700	700	411	915	660	1,810
13	1,380			3,780	740	1,010	757	2,400	645	1,010	585	1,560
14	1,440			2,690	724	915	782	1,110	757	748	529	1,370
15	3,090			2,650	740	915	934	897	660	585	536	982
16				3,200	782	782	934	782	638	529	515	630
17				2,920	740	740	825	870	630	489	502	708
18				2,650	700	1,520	700	843	740	361	463	791
19			36,400	2,510	660	9,500	915	700	592	379	476	757
20			39,800	2,290	660	6,680	622	645	645	615	411	724
21			18,600	2,450	645	4,350	515	515	502	888	373	1,290
22			17,900	6,420	585	22,000	385	515	424	915	325	9,360
23			18,100	4,460	585	11,900	337	470	379	800	349	7,380
24			26,800	3,240	482	6,300	1,220	361	314	676	398	5,920
25			34,500	2,650	515	4,420	915	314	292	645	367	3,280
26			28,200	2,320	482	3,010	825	281	270	585	314	2,530
27			21,200	2,080	515	2,130	700	240	204	578	325	2,060
28			19,300	1,850	385	1,820	515	225	220	543	314	1,680
29			14,100	1,640	515	1,520	529	255	230	463	668	2,620
30			11,000	1,580	450	1,280	1,520	240	204	463	2,350	8,350
31			8,130	......	418	......	1,520	220	......	411	......	3,690

Mean Daily Discharge, Second-feet, of Chemung River at Chemung, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	2,780	......	600	10,500	1,160	3,090	1,380	437	379	100	1,530	1,370
2	2,210	......	630	7,970	1,100	2,560	1,480	411	292	156	1,350	879
3	1,630	......	638	6,380	1,310	1,900	4,680	385	349	216	1,280	888
4	1,850	......	14,400	7,150	2,300	1,560	2,560	373	361	170	1,300	660
5	3,090	......	4,680	10,100	1,920	1,400	1,670	1,320	314	245	1,220	482
6	2,320	......	2,260	12,000	2,000	4,790	1,310	1,060	349	159	1,070	1,360
7	1,610	......	1,770	8,670	1,780	4,370	1,040	972	337	180	906	7,230
8	982	......	1,460	6,350	1,400	2,510	870	1,820	a296	898	834	3,320
9	708	......	1,340	5,770	1,280	1,910	852	1,940	a255	615	800	1,660
10	774	......	1,150	13,400	1,750	1,680	774	1,310	a214	502	692	1,640
11	879	......	982	13,600	1,640	1,780	724	2,080	173	337	676	1,290
12	1,030	......	915	9,620	1,290	1,540	708	2,560	184	456	708	1,880
13	934	......	870	7,410	1,270	1,160	622	1,610	250	489	774	1,310
14	879	......	774	6,110	1,240	861	550	1,110	320	515	934	1,480
15	879	......	740	8,480	1,220	870	515	843	173	522	982	1,630
16	816	......	748	8,720	1,220	1,430	470	645	121	489	972	5,310
17	660	......	660	6,350	1,320	7,940	482	557	159	398	915	3,400
18	808	......	463	5,040	4,110	9,530	543	508	121	367	1,050	2,260
19	808	......	630	4,070	3,280	6,860	660	463	103	349	6,890	774
20	816	......	385	3,320	2,190	6,890	652	668	91	5,130	6,160	571
21	808	......	502	2,720	1,500	4,070	564	1,410	97	4,950	5,660	1,420
22	3,280	......	645	2,900	1,310	2,810	592	1,110	97	4,030	5,590	1,410
23	9,280	......	543	2,740	1,200	2,160	476	708	124	2,790	3,990	1,520
24	12,600	......	645	1,850	1,070	2,020	463	1,110	196	2,000	2,900	4,180
25	5,990	......	536	2,260	1,280	1,490	450	1,050	180	1,560	1,970	3,120
26	3,320	......	615	2,020	1,150	1,220	437	724	152	1,410	1,940	......
27	2,550	......	2,130	1,660	8,450	1,050	437	716	159	1,310	1,680	......
28	2,210	......	28,400	1,420	14,600	914	489	660	97	1,100	1,410	......
29	1,770	......	9,940	1,320	8,940	1,580	652	732	94	1,180	1,290	......
30	1,590	......	9,390	1,230	5,180	1,560	502	543	82	1,110	1,180	......
31	1,370	......	24,400	......	3,650	......	456	385	......	1,090	......	6,110

Monthly Discharge of Chemung River at Chemung, N. Y.

[Drainage area, 2,440 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1905.					
January 1-15	5,920	615	2,050	.840	.47
February	....	....	....	....	....
March 19-31	39,800	8,130	22,600	9.26	4.48
April	6,420	1,580	3,280	1.34	1.50
May	1,430	385	728	.298	.34
June	22,000	298	2,960	1.21	1.35
July	4,280	337	1,040	.426	.49
August	2,400	220	622	.255	.29
September	757	204	390	.160	.18
October	1,010	200	491	.201	.23
November	2,350	314	579	.237	.26
December	9,360	630	2,900	1.19	1.37
1906.					
January	12,600	660	2,300	.943	1.09
February	....	....	....	....	....
March	28,400	385	3,670	1.50	1.73
April	13,600	1,230	6,040	2.48	2.77
May	14,600	1,070	2,680	1.10	1.27
June	9,530	861	2,780	1.14	1.27
July	4,680	437	905	.371	.43
August	2,560	373	975	.400	.46
September	379	82	204	.084	.09
October	5,130	100	1,120	.459	.53
November	6,890	676	1,960	.803	.90
December 1-25, 31	7,230	482	2,200	.902	.11

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[a] Discharge interpolated.

ALLEGHENY RIVER DRAINAGE BASIN.

DESCRIPTION OF BASIN.

Allegheny river, which, with the Monongahela, forms the Ohio at Pittsburg, rises in northern Pennsylvania, flows north into the state of New York, then flows south through western Pennsylvania. The head waters have an elevation of about 2,500 feet and join those of Genesee river on the north and of the Susquehanna on the east. The total length from the source to the mouth at Pittsburg is about 300 miles, 47 of which are in the state of New York. The principal facts concerning this river have been given in a report by George Lehman, assistant engineer, contained in House Document No. 72, Fifty-fifth Congress, third session. Although this river drains a large area, much of which is of an elevated and even mountainous character, yet it is of comparatively small value for water-power. The total fall in 255 miles, between Olean, N. Y., and the mouth, is only 725 feet, or an average of less than 3 feet per mile. This descent is accomplished without abrupt pitches, and even with few rapids having a fall of much consequence. The drainage basin of Allegheny river above Red House is comparatively rugged and precipitous. It is mostly covered with brush and light forest. A considerable amount of snow accumulates in the winter and feeds the stream until late in spring. The basin is underlain by shales of the Chemung series, and the depth of soil is usually small, excepting in stream valleys. There are no lakes and no artificial storage tributary to the stream. The Cuba reservoir, which feeds the Erie canal through Genesee river, lies on the divide between the Allegheny and Genesee drainage basins. A part of the overflow from this reservoir passes into the Allegheny, the rest passes into Genesee river. During about half of the year the river is navigable for small steamers to Franklin, 123 miles above Pittsburg.

The drainage areas of the river and its chief tributaries are given in the following table:

Drainage areas of Allegheny River and tributaries.

STREAM.	Locality.	Drainage area.
		Square miles.
Allegheny river	Mouth	11,100
Allegheny river	Kittanning	8,688
Allegheny river	Above mouth of French creek	5,950
Allegheny river	Franklin	5,670
Allegheny river	Warren	3,050
Allegheny river	Salamanca	1,560
Allegheny river	Olean, below Olean creek	1,100
Allegheny river	Port Allegheny	220
Conewango creek	Mouth	935
Tionesta creek	Mouth	458
French creek	Mouth	1,180
Clarion river	Mouth	1,175
Redbank creek	Mouth	526
Mahoning creek	Mouth	397
Kiskiminitas river	Mouth	1,846
Kiskiminitas river	Salina	1,770
Blacklick creek	Blacklick	403

ALLEGHENY RIVER AT RED HOUSE, N. Y.

This station was established September 4, 1903, by R. E. Horton. It has since been maintained by the U. S. Geological Survey in co-operation with this Department. It is located at the Red House bridge, near the stations of the Erie and Pennsylvania railroads and about 5 miles below Salamanca, N. Y., about 13 miles above the point where the river leaves New York state. At Olean, N. Y., the wasteway from the Cuba reservoir enters the stream through Olean creek. This reservoir is located on the divide between Oil creek, tributary to Allegheny river, and Genesee river. The storage is commonly turned into Genesee river through the abandoned summit level of Genesee Valley canal, but may be diverted into Oil creek through the guard-lock at the head of the canal.

The channel is straight for 800 feet above and below the station, 494 feet wide between abutments, broken by two piers. The current velocity is well distributed. The right bank is high and does not overflow. The left bank overflows only at flood stages. At extreme high water there is an additional flood channel on the left bank. The bed is of gravel and is regular.

Discharge measurements are made from the down-stream side of the bridge. The initial point for soundings is the left end of the down-stream side of the bridge.

A standard chain gage is fastened to the up-stream side of the bridge near the middle of the left span; length of chain, 24.16 feet.

The gage is read twice each day by G. H. Smith. The bench mark is a circle cut on the down-stream side of the left abutment; elevation, 21.09 feet above the datum of the gage.

Mean Daily Gage Height, in Feet, of Allegheny River at Red House, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	6.2	4.55	3.6	7.15	4.25	4.75	3.0	3.0	3.0	4.10	5.25	4.2
2	5.8	4.35	3.6	6.8	4.3	4.45	3.0	2.95	3.0	3.75	4.95	4.3
3	5.25	4.15	3.65	6.25	5.5	4.25	3.1	2.9	3.05	3.5	4.9	4.2
4	5.7	4.2	4.75	6.1	5.25	4.05	3.1	2.9	3.4	3.5	4.9	4.0
5	6.05	4.0	4.75	6.65	5.35	3.85	3.05	3.55	3.45	3.5	4.8	4.05
6	5.5	3.9	4.25	6.75	5.3	4.15	3.1	3.3	3.3	4.0	4.7	5.6
7	5.2	3.85	4.2	6.7	4.85	4.1	3.1	3.3	3.05	6.0	4.45	8.6
8	4.8	3.8	4.1	6.25	4.75	3.95	3.0	3.6	3.0	5.85	4.25	7.25
9	4.55	3.85	4.0	5.95	4.6	3.8	2.9	3.6	2.9	5.5	4.15	6.45
10	4.3	3.8	3.85	6.65	4.8	3.7	2.9	3.7	2.8	5.25	4.0	6.15
11	4.55	3.75	3.8	7.1	4.8	3.65	2.9	3.8	2.8	5.1	4.1	6.90
12	4.35	3.8	3.8	6.4	4.7	3.55	2.9	4.0	2.7	5.0	4.2	6.4
13	4.3	3.65	3.7	6.6	4.55	3.4	2.85	3.75	2.8	5.0	4.35	6.55
14	4.2	3.7	3.6	6.45	4.65	3.3	2.8	3.5	3.0	5.4	4.2	6.65
15	4.15	3.75	3.6	6.3	4.75	3.3	2.8	3.4	3.0	5.15	4.1	8.8
16	4.55	3.75	3.6	6.45	4.5	3.3	2.8	3.3	3.0	4.85	4.0	8.8
17	4.75	3.65	3.5	6.35	5.45	3.3	2.8	3.15	2.9	4.55	4.05	6.2
18	4.7	3.5	3.5	6.0	5.35	3.3	2.8	3.0	2.8	4.3	4.75	6.65
19	4.6	3.5	3.4	5.55	4.9	3.6	2.8	3.1	2.8	4.2	5.75	6.65
20	4.6	3.5	3.2	5.35	4.6	3.45	2.85	3.1	2.8	5.0	5.5	6.45
21	6.5	3.6	3.2	5.5	4.25	3.4	2.9	3.9	3.0	5.1	6.25	6.45
22	7.7	3.9	3.2	5.1	4.05	3.3	2.85	4.05	4.0	4.75	6.55	6.45
23	8.1	3.8	3.1	4.7	3.95	3.3	2.8	3.8	3.75	4.65	5.8	6.45
24	8.25	3.8	3.0	5.3	4.0	3.35	2.8	3.6	3.45	4.5	5.35	6.1
25	7.6	3.7	3.3	5.2	4.85	3.2	2.8	3.55	3.3	4.8	5.0	......
26	7.0	3.75	3.4	4.85	4.6	3.2	2.8	3.35	3.15	5.05	4.75	......
27	6.5	3.6	5.25	4.8	4.7	3.2	2.7	3.2	3.1	4.7	4.5	......
28	5.85	3.5	8.4	4.7	5.3	3.1	2.7	3.2	3.0	4.5	4.6	......
29	5.3	......	7.3	4.5	5.35	3.1	2.8	3.2	3.0	4.95	4.55	......
30	4.95	......	6.9	4.4	5.05	3.0	2.8	3.1	3.55	4.5	4.4	......
31	4.85	......	7.75	......	5.2	......	3.0	3.1	.....	5.2	......	......

Some ice obstruction during February and March, but channel not entirely closed.

Discharge Measurements of Allegheny River at Red House, N. Y.

DATE.	Hydrographer.	Width.	Area of section.	Gage height.	Discharge.
1906.		*Feet.*	*Square feet.*	*Feet.*	*Second-feet.*
April 16	C. C. Covert	370	2,250	6.59	7,820

Rating table for Allegheny River at Red House, N. Y., from September 4, 1903, to December 31, 1906.

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
Feet.	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*	*Feet.*	*Second-feet.*
2.70	195	4.00	1,471	5.30	3,820	7.20	9,400
2.80	260	4.10	1,605	5.40	4,065	7.40	10,080
2.90	328	4.20	1,745	5.50	4,315	7.60	10,790
3.00	400	4.30	1,891	5.60	4,570	7.80	11,530
3.10	478	4.40	2,043	5.70	4,830	8.00	12,300
3.20	564	4.50	2,200	5.80	5,100	8.20	13,120
3.30	658	4.60	2,365	5.90	5,375	8.40	13,960
3.40	759	4.70	2,540	6.00	5,660	8.60	14,800
3.50	866	4.80	2,725	6.20	6,245	8.80	15,660
3.60	978	4.90	2,920	6.40	6,845	9.00	16,540
3.70	1,095	5.00	3,130	6.60	7,460	10.00	21,100
3.80	1,216	5.10	3,350	6.80	8,090	11.00	26,200
3.90	1,341	5.20	3,580	7.00	8,740	12.00	31,800

The above table is applicable only for open-channel conditions. It is based upon 20 discharge measurements made during 1903-1906. It is well defined between gage heights 3.1 feet and 10.0 feet.

Mean Daily Discharge, Second-feet, Allegheny River at Red House, N. Y.

DAY.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1906.												
1	6,240	2,280	978	9,240	1,820	2,630	400	400	400	1,600	3,700	1,740
2	5,100	1,970	978	8,090	1,890	2,120	400	364	400	1,160	3,020	1,890
3	3,700	1,680	1,040	6,400	4,320	1,820	478	328	439	866	2,920	1,740
4	4,830	1,740	2,630	5,950	3,700	1,540	478	328	759	866	2,920	1,470
5	5,800	1,470	2,630	7,620	3,940	1,280	439	922	812	866	2,720	1,540
6	4,320	1,340	1,820	7,930	3,820	1,680	478	658	658	1,470	2,540	4,570
7	3,580	1,280	1,740	7,770	2,820	1,600	478	658	439	5,660	2,120	14,800
8	2,720	1,220	1,600	6,400	2,630	1,410	400	978	400	5,240	1,820	9,570
9	2,280	1,280	1,470	5,520	2,360	1,220	328	978	328	4,320	1,680	7,000
10	1,890	1,220	1,280	7,620	2,720	1,100	328	1,100	260	3,700	1,470	6,100
11	2,280	1,160	1,220	9,070	2,720	1,040	328	1,220	260	3,350	1,600	8,410
12	1,970	1,220	1,220	6,840	2,540	922	328	1,470	195	3,130	1,740	6,840
13	1,890	1,040	1,100	7,460	2,280	759	294	1,160	260	3,130	1,970	7,300
14	1,740	1,100	978	7,000	2,450	658	260	866	400	4,060	1,740	7,620
15	1,680	1,160	978	6,540	2,630	658	260	759	400	3,460	1,600	15,700
16	2,280	1,160	978	7,000	2,200	658	260	658	400	2,820	1,470	15,700
17	2,620	1,040	866	6,700	4,190	658	260	521	328	2,280	1,540	6,240
18	2,540	866	866	5,660	3,940	658	260	400	260	1,890	2,630	7,620
19	2,360	866	759	4,440	2,920	978	260	478	260	1,740	4,960	7,620
20	2,360	866	564	3,940	2,360	812	294	478	260	3,130	4,320	7,000
21	7,150	978	564	4,320	1,820	759	328	1,340	400	3,350	6,400	7,000
22	11,200	1,340	564	3,350	1,540	658	294	1,540	1,470	2,630	7,300	7,000
23	12,700	1,220	478	2,540	1,410	658	260	1,220	1,160	2,450	5,100	7,000
24	13,300	1,220	400	3,820	1,470	708	260	978	812	2,200	3,940	5,950
25	10,800	1,100	658	3,580	2,820	564	260	922	658	2,720	3,130	2,180
26	8,740	1,160	759	2,820	2,360	564	260	708	521	3,240	2,630	*1,740
27	7,150	978	3,700	2,720	2,540	564	195	564	478	2,540	2,200	*1,870
28	5,240	866	14,000	2,540	3,820	478	195	564	400	2,200	2,360	*2,800
29	3,820	......	9,740	2,200	3,940	478	260	564	400	3,020	2,280	*2,330
30	3,020	......	8,410	2,040	3,240	400	260	478	922	2,200	2,040	*2,030
31	2,820	......	11,300	......	3,580	......	400	478	......	3,580	......	*3,580

* Discharges estimated from records at Kittanning, Pa.

Monthly Discharge of Allegheny River at Red House, N. Y.

[Drainage area, 1,640 square miles.]

MONTH.	DISCHARGE IN SECOND-FEET.			RUN-OFF.	
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.
1906.					
January	13,300	1,680	4,780	2.91	3.36
February	2,280	866	1,240	.756	.79
March	14,000	400	2,460	1.50	1.73
April	9,240	2,040	5,570	3.40	3.79
May	4,320	1,410	2,800	1.71	1.97
June	2,630	400	1,000	.610	.68
July	478	195	322	.196	.23
August	1,540	328	777	.474	.55
September	1,470	195	505	.308	.34
October	5,660	866	2,740	1.67	1.92
November	7,300	1,470	2,860	1.74	1.94
December	15,700	1,470	5,930	3.62	4.17
The year	15,700	195	2,580	1.57	21.47

No correction made in discharge for ice conditions in February and March; flow was probably only slightly diminished by ice.

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